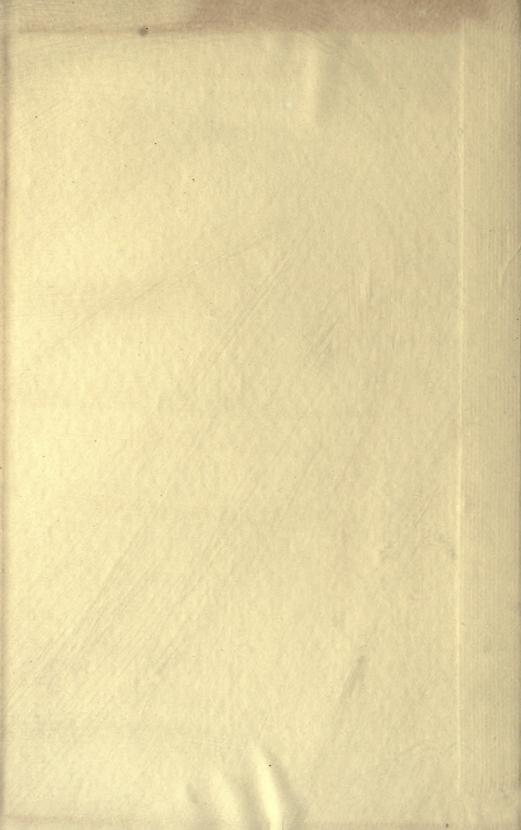
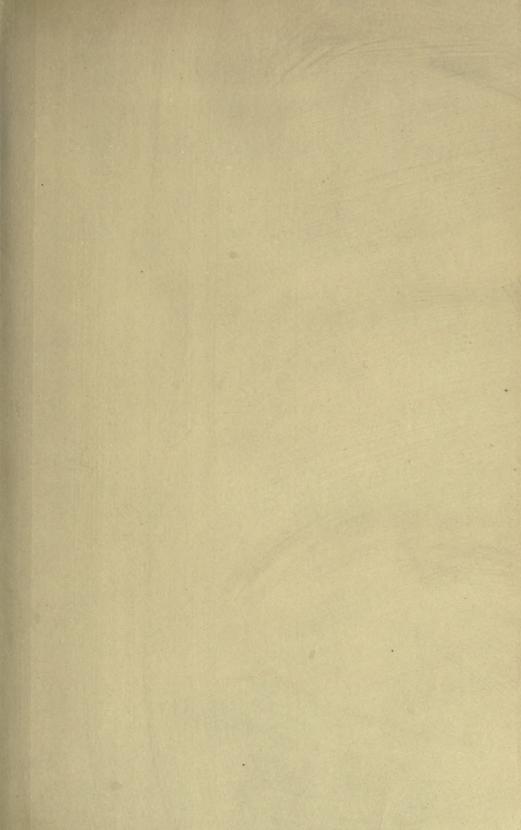
COSTS, MERCHANDISING PROCEEDS. ADVERTISING AND SALES. IN THE RETAIL DISTRIBUTION OF PLUTHING

TOTAL EXPENSES





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Costs, Merchandising Practices, Advertising and Sales in the Retail Distribution of Clothing

BY

NORTHWESTERN UNIVERSITY SCHOOL OF COMMERCE BUREAU OF BUSINESS RESEARCH HORACE SECRIST, DIRECTOR

IN CO-OPERATION WITH THE
NATIONAL ASSOCIATION OF RETAIL CLOTHIERS

VOLUME III

EXPENSES AND EXPENSE RATIOS—GENERAL, BUSHELLING, AND TOTAL EXPENSES, 1919, 1918, AND 1914

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PREFACE

This study on Expenses and Expense Ratios—General, Bushelling and Total Expenses, 1919, 1918, and 1914, is Volume III in the series on Costs, Merchandising Practices, Advertising and Sales in the Retail Distribution of Clothing. Together with Volume II, already published, and Volume IV, soon to follow, it completes those parts of the study of retail distribution of clothing which have to do with expenses and expense distribution.

While the statistical data in this study are drawn solely from retail clothiers, it is believed that the nature of the discussion, as well as the types

of ratios and the principles of expense apportionment which are developed, has a significance far beyond that which relates to this industry. How nearly the principles have universal application is not known. To determine this, sampling of a similar nature in other industries would be necessary. In spite of its narrow background, however, the opinion is hazarded that its application is more than local, its method indicative of that which might be followed in similar fields, and many of its results of general and permanent value.

Northwestern University School of Commerce, Bureau of Business Research, HORACE SECRIST, Director.



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UCH of what is said in the Introduction to Volume II applies with equal force to this volume. Of course, in so far as the contents of the two volumes are different, the emphasis given to the method of selecting the data and to the cautions in their use varies. In general, however, the point of view has general application.

The method of developing the expense ratios for general, for bushelling, and for total expenses is the same as that used in the case of rent and wages and salaries. Only those data which fulfilled all of the characteristics, necessary to the comparisons, are used. The results are net rather than gross, the zero items having been removed in all cases.

Of course, as was called attention to in Volume II, the elimination of certain of the stores in the various comparisons makes it impossible to combine, with 100 per cent, accuracy, the various expense ratios. This is particularly true for amounts of expense such as general expense or wages and salaries, which have been broken up into a number of separate parts. To add the ratios, based upon a shifting number of stores, may result in securing an amount greater or less than 100 per cent. This point is stressed not only in the Introduction, but also in various places throughout Volume II, and is repeated at appropriate places in this volume.

In spite of the fact that the expense ratios when combined will produce 100 per cent, more or less, the excess or deficiency may be ignored for summary and graphic purposes. ratios for the major expense items are combined and graphically illustrated in Section VI. This section is prepared largely for convenience and summary purposes. It does not displace the discussion of the various items of expense contained in Volumes II, III, and IV, where the peculiarities of the various ratios are discussed from the point of view of store location and size.

It may be worth while to state again that the method of treatment followed in this volume is to develop. out of the actual experience of clothing stores, a series of standards which may serve as guides for stores in expense distribution. Care has been taken at each stage in the development of these studies to remove all data of doubtful character; to compare, as nearly as can be, only those facts which have common characteristies: and to state the results in a form which will be serviceable for merchants and others interested in this study.

Out of the wealth of experience supplied the Bureau, the determination of standards is possible. It is evident that individual stores, because of local peculiarities, age, and trade conditions, will deviate from these standards. Nevertheless, under the competitive conditions which obtain in the clothing industry, they cannot help but be of service as general indices, both of the amount of

expense and its distribution, to those who wish to know the conditions which obtain beyond their immediate premises.

THIS part of the report is designed to give in brief form the more important of the conclusions and ratios concerning expenditures for general, bushelling, and total expense in retail clothing stores. It is not designed to take the place of the summaries in the text proper. There the limitations of the data are more specifically pointed out and comparisons are made between the ratios developed in this and the other volumes. Its purpose is largely for convenience and ready reference, and should be regarded by the reader in this light.

1.—YEARLY AMOUNTS OF GENERAL EX-PENSE IN CLOTHING STORES, 1919, 1918, AND 1914.

General expense, as used in this study, is fully defined on page 188. The place which this part of the questionnaire has in the schedule will be shown in the last volume, in which a copy of the entire schedule will be published.

A.—Yearly Amounts of General Expense per \$100 of Total Net Sales.

The average amount of general expense per \$100 of total net sales for the years 1919, 1918, and 1914, combined, is \$5.46. This ratio is based upon 834 store-years, net sales of \$75,260,785, and general expense of \$4,103,875. The corresponding ratio

of general expense to total net sales in 1919 was \$5.16; in 1918, \$5.85; and in 1914, \$5.68. That is, the amounts increased between 1914 and 1918, and decreased between 1918 and 1919. These year ratios are based upon net sales of \$40,041,903 in 1919; \$25,204,990 in 1918; and \$9,959,892 in 1914. The corresponding amounts of general expense were for 1919, \$2,064,274; for 1918, \$1,474,180; and for 1914, \$565,421. While the stores used in developing these ratios are not precisely the same as those used in the study of rents and wages and salaries, the number is sufficiently large to serve as an adequate basis for ratios of this type. In a general way the ratios for the different items of expense may be directly compared. This is done in Section VI, following.

When identical stores are used for 1914, 1918, and 1919, the ratios of total general expense per \$100 of total net sales closely agree with those for a varying number of stores. The ratios increased between 1914 and 1918, and decreased between 1914 and 1919.

When stores of different size are compared, there is a distinct tendency for the amounts of general expense per \$100 of total net sales to increase with the size of stores. However, when stores without respect to size are compared for different sizes of cities, the ratios are essentially constant. How truly this comparison holds may be determined by consult-

ing the tables relating to this subject.*

For stores classified both by size and by the population of the city in which they are located, the amounts of general expense per \$100 of total net sales are generally higher for stores in large cities than they are for stores of the same size in small cities. For stores in cities with population under 40,000, the ratios of general expense to total net sales decrease with an increase in the size of stores, while for stores in large cities, the ratios increase with the size of the stores.

B.—Yearly Amounts of General Expense per \$100 of Total Expense.

On the average, for the three years 1919, 1918, and 1914, combined, general expense constitutes \$23.87 out of every \$100 of total expense. This ratio is based upon 834 store-years, \$17,190,289 of total expense, and \$4,103,875 of general expense. In 1919, the amount of general expense per \$100 of total expense was \$23.92; in 1918, \$24.39; and in 1914, \$22.48. The ratio increased 8.5 per cent. between 1914 and 1918, and decreased 1.9 per cent. between 1918 and 1919.

The average amount of general expense per \$100 of total expense remains practically constant for stores of different size for the country as a whole and for each geographical division. However, there are some exceptions which need not be specified

* pp. 201 to 204.

here but which are fully shown in the detailed tables bearing upon this subject.

C.—Yearly Amounts of Specified Items of General Expense per \$100 of Total Net Sales.

The more important individual items of general expense per \$100 of net sales decreased between 1914 and 1919, but the changes are far from uniform from year to year and from item to item. The decrease is greatest for the amounts allowed for depreciation on merchandise. In 1914, \$2.18 per \$100 of net sales was charged to this account. In 1918, the amount was \$1.50, and in 1919, \$1.00.

The average amount of expense per \$100 of total net sales, for the three years combined, is \$1.32 for depreciation on merchandise, \$0.76 freight and cartage, \$0.64 for bad debts, \$0.64 for interest on borrowed money, \$0.58 for state and local taxes. \$0.56 for light, heat and water, and \$0.51 for depreciation on fixtures. It is difficult to summarize the relations which the amounts of the different items of general expense bear to total net sales in stores of different size. Generally speaking, however, the tendency is for the amounts to decrease, but not with equal regularity, as the stores grow larger. For each of the items which have been separately treated, the reader should consult the detailed tables. It is both difficult and unsafe to generalize in this respect.

2.—YEARLY AMOUNTS OF BUSHELLING EXPENSE PER \$100 OF TOTAL NET SALES OF CLOTHING, 1919, 1918, AND 1914.

Bushelling expense as used in this study includes tailors' wages and commissions, and the costs of materials and supplies used in altering clothing.

The average amount of bushelling expense per \$100 of sales of clothing, for 1919, 1918, and 1914, combined, is \$2.66. This ratio is based upon an experience of \$14,961,678 of sales of clothing and \$398,447 of bushelling expense. The amount for 1919 is \$2.57; for 1918, \$2.77; and for 1914, \$2.76. These amounts apply to the country as a whole, but they do not radically vary for the various geographical divisions.

3.—YEARLY AMOUNTS OF TOTAL EX-PENSE IN CLOTHING STORES, 1919, 1918, AND 1914.

Total expense, as used herein, is an aggregate of all expense items rent, wages and salaries, advertising, bushelling, and general expenses.

The average amount of total expense per \$100 of total net sales, for 1919, 1918, and 1914, combined, is \$22.69. For 1919, this amount is

\$21.49; for 1918, \$23.69; and for 1914, \$24.56. These averages are based upon \$44,846,377 of sales for 1919, \$29,040,009 for 1918, and \$12,914,891 for 1914. The amounts of total expense for these years respectively are \$9,639,555, \$6,879,283, and \$3,172,162. This experience represents 399 stores for 1919, 363 for 1918, and 233 for 1914.

Generally speaking, the amounts of total expense per \$100 of total net sales increase with the size of the store. Those for the very small stores, however, are higher than for the stores with slightly larger sales. For the three years combined, the stores with sales under \$40,000 have an average total expense per \$100 of total net sales of \$21.15. The corresponding amounts for the other salesgroups are \$20.43 for the stores with sales between \$40,000 and \$80,000; \$22.46 for those with sales between \$80,000 and \$180,000; and \$24.84 for those with sales of \$180,000 and over.

The amounts of total expense increase directly with the size of cities in which stores are located. This is true for all stores, considered as one group, as well as for stores classified by size. The condition holds for each year separately and for the three years combined.

III. YEARLY AMOUNTS OF GENERAL EXPENSE IN CLOTHING STORES, 1919, 1918, AND 1914

HE questionnaire under the heading "General Expenses" provided for each of the items which should properly fall under this caption. The items included are listed immediately below.

- (1) Light, heat and water
- (2) Communication:
 (Telegrams, telephones, including tolls, messenger services)
- (3) Cartage and drayage
 (Do you charge these to expense or add them to the cost of merchandise?.....)

 Which?
- (4) Traveling expenses
- (5) Delivery
 (Rent for garage, stable, horse
 feed, gasoline, tires, depreciation, repairs)
- (6) Office supplies
- (7) Interest on borrowed money
- (8) Bad debts written off
- (9) Rent on cash carriers
- (10) Depreciation on merchandise
- (11) Depreciation on fixtures
- (12) Depreciation on building (if owned)
- (13) Wrappings and containers
- (14) Allowances to fulfill guaranty on goods sold
- (15) Elevator expenses (not including wages of operators)
- (16) Taxes:

(State and local taxes paid on business, including real estate occupied by your store)

- (17) Freight, express and parcel post
 (Do you charge these to expense
 - or to cost of merchandise?.....)
- (18) Legal fees
- (19) Insurance
 (Burglary, tornado, plate glass,
 hold-up, workmen's compensation, casualty)
- (20) Membership dues in local commercial associations, national associations, clubs, lodges, etc.
- (21) Subscriptions to local credit bureau
- (22) Subscriptions to trade papers
- (23) Contributions to charity
- (24) Contributions to community festivals, "dress up" occasions, fairs
- (25) Losses (Bad checks, shortages in cash drawer)
- (26) Merchandise lost in transit, claims not allowed and uncollected

In the absence of a uniform system of accounts, in the stores supplying information, and common practices among merchants in distributing general expenses, to have asked solely for a total would have resulted in securing data of little or no value for comparative purposes. Accordingly, the alternative plan of indicating the types of expenditures upon which

details were desired, was adopted. It was thought that the listing of the items which should be reported under general expenses would have two valuable and corrective results; first, that of indicating clearly the meaning which it was intended this expression should have, and of allowing those able to do so, to report expenditures for the itemized purposes; and, second, that of facilitating the editing of the returns, and of permitting a comparative analysis of the details in relation to each other, to net sales, and to other elements of expense. Both of these results were realized. While it may be said that the total of general expenses, as well as some of the detail, are neither so accurate nor so complete as are the data for other parts of the study, yet both may be used statistically in the determination of expense ratios.

So long as comparisons are restricted to totals which have common elements in the particulars involved, there is little danger in the development of expense ratios, providing that the number of instances considered are adequate, and the conditions by which they are affected are essentially homogeneous. These things were kept in mind in the preparation of Volume II and are not forgotten here.

The data on general expenses apply to the three years 1919, 1918, and 1914, and involve 351 stores in 1919, 305 stores in 1918, and 178 stores in 1914. Together, this experience covers 834 store-years, \$75,206,785 cf

total net sales, and \$4,103,875 of general expense.

1.—YEARLY AMOUNTS OF GENERAL EX-PENSE IN RELATION TO TOTAL NET SALES, 1919, 1918, AND 1914.

Stores paid on the average, during the three years 1919, 1918, and 1914, \$5.46 in general expense per \$100 of total net sales. In 1919, this amount was \$5.16; in 1918, it was \$5.85; and in 1914, \$5.68. This ratio for 1914 is an average based upon records from 178 stores, \$9,959,892 of total net sales, and \$565,421 of general expense. The ratio for 1918 is based upon an analysis of 305 stores, \$25,-204,990 of total net sales, and \$1,474,180 of general expense. For 1919 the ratio is secured from an analysis of even a wider experience, 351 stores with total net sales of \$40,041,903 and general expense of \$2,064,274 being used.

The ratios for each of the years, and for the combined period, are shown in actual and relative amounts in Table 1.

The spread of years between 1914 and 1918 and between 1918 and 1919 should be kept in mind in comparing these ratios. In the four-year period, 1914 to 1918, the ratios of general expense to total net sales increased slightly—the difference being \$0.17 or 3 per cent. During the single year between 1918 and 1919, the ratios decreased by \$0.69 or 11.8 per cent. The change from the small increase, spread over the four-year period, to

the comparatively large decrease, for the one-year period, is significant and in keeping with the tendencies noticed in Volume II for wages and salaries. Table 1 contains the ratios of general expense to total net sales. Table 2 shows the average amount of sales and general expense per store, to-

TABLE 1

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, 1919, 1918, AND 1914

	Sto	res Reporting o	Ratio Which Amount of General Expense per \$100 of Total Net Sales			
Years	Number of Store- years	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Each Year, is of the Amount for All Years Per Cent.	Per Cent.
Total (Average)	834	\$75,206,785	\$4,103,875	\$5.46		100.0
1919	351	40,941,903	2,064,274	5.16		94.5
1918	305	25,204,990	1,474,180	5.85		107.1
1914	178	9,959,892	565,421	5.68		104.0

Average \$5.46

TABLE 2

AVERAGE AMOUNT AND PER CENT. INCREASE OR DECREASE OF TOTAL NET SALES AND GENERAL EXPENSE PER STORE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, ALL STORES, 1919, 1918, AND 1914

		age Amount of Total t Sales per Store		ge Amount of General spense per Store	Average Amount of General Expense per \$100 of Total Net Sales			
Tears		Per Cent. Increase over 1914		Per Cent. Increase over 1914		Per Cent. Increase or Decrease from 1914		
	Amount	Amount Graphic Per Cent. 0 30 50 90 12	Amount	Amount Graphic Per Cent. Q 30 60 90 12	Amount	Amount	Graphic Per Cent. 30 60 70 120	
1919	\$114,079	105.9	\$5,881	85.1	\$5.16	-9.2		
1918	82,639	47.7	4,833	52.1	5.85	+3.0		
1914	55,954		3,177		5.68			

gether with the percentage change in both 1918 and 1919 compared with 1914, and the per cent. of increase or decrease of general expense to sales.

Proportionately, the increase of 38.0 per cent. in sales per store for

the one year between 1918 and 1919 is approximately as large as that for the four years between 1914 and 1918. The increase of general expense per store, however, between 1918 and 1919—21.6 per cent.—is less than one-

half as large as the increase of the same kind between 1914 and 1918. Relatively, the amount of general expense per \$100 of total net sales fell three times as much in the one-year period between 1918 and 1919 as it rose during the four-year period between 1914 and 1918.

There is a striking similarity between the tendencies in the changes of general expense and expense for wages and salaries, for the years under consideration, when these are expressed on a per store basis and in terms of \$100 of total net sales. Expenses for both purposes are subject to current readjustment with sales, but not necessarily at the same rate.

Rents, on the other hand, being subject to less frequent change, and the space for which rent is paid being capable of different degrees of utilization, show not only less absolute change but also a more clearly marked direction of change. In this connection it is of interest to compare Tables 1, 2, 3, and 36, 37, and 38 in Volume II with Tables 1, 2, and 3 in this volume.

The discussion above has reference to a varying number of stores. Table 3 shows a comparison of 194 stores which reported both their general expense and their total net sales for each of the years 1919, 1918, and 1914.

TABLE 3

AVERAGE AMOUNT AND PER CENT. INCREASE OR DECREASE OF TOTAL NET SALES AND GENERAL EXPENSE PER STORE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 194 STORES, 1919, 1918, AND 1914

	Average Amount of Total Net Sales per Store			Average Amount of General Expense per Store			Average Amount of General Expense per \$100 of Total Net Sales		
Years		Per Cent. Increase over 1914				nt. Increase er 1914			. Increase or e from 1914
	Amount	Amount	Graphic Per Cent. 0 40 80 120 160	Amount	Amount	Graphic Per Cent. 40 80 120 16	Amount	Amount	Graphic Per Cent. 40 80 120 160
1919	\$125,416	133.2		\$6,753	126.6		\$5.38	-2.9	
1918	87,166	62.1	_	5,149	72.8		5.91	+6.7	
1914	53,776			2,980			5.54		

For exactly the same stores, general expense per \$100 of total net sales increased by 6.7 per cent. between 1914 and 1918, and decreased by 2.9 per cent. between 1914 and 1919, and by 9.0 per cent. between 1918 and 1919. Stated in another way, the increase between 1914 and 1918—

four years—was \$0.37, while the decrease between 1918 and 1919—one year—was \$0.53, or \$0.16 more. The average amount of sales per store and the average amount of general expense per store, on the other hand, both show an increase from 1914 to 1918 and from 1914 to 1919. General

expense increased faster than sales between 1914 and 1919. The consequent effect was a relative increase in general expense per \$100 of total net sales for 1918 over 1914 and a decrease in the corresponding amount for 1919 over both 1918 and 1914. There is complete uniformity in the direction of the changes in net sales, in general expense, and in the relation between the two, when both the same and a varying number of stores are considered for the different years. Although the amounts of sales and of general expense per store for both groups of stores differ noticeably for the same years, the relations between them are strikingly uniform.

The amounts and relations for identical stores are shown in Table 3.

A.—Yearly Amounts of General Expense per \$100 of Total Net Sales for Stores Classified by Size, 1919, 1918, and 1914.

The amounts of general expense per \$100 of total net sales, when averaged for stores classified by size, increase as the stores become larger. This tendency is not strikingly evident when stores are classified into narrow salesgroups, as in the upper parts of Tables 4, 5, 6, and 7, but it is pronounced when they are shown by wider groups, as in the lower parts of the same tables. Of course, these ratios, as averages, are subject to all of the limitations of such expressions. Individual differences for stores are submerged and lost in the combina-

tions which are made. Moreover, the amounts for the individual stores are the totals which were reported-corrected to agree, as nearly as it was possible to make them, with the detailed amounts shown-and are not so homogeneous as are the individual items of general expense. Because of the variety of purposes for which general expenses are incurred and the different practices of distributing expenditures for such purposes, averages less satisfactorily characterize typical conditions here than they do in other portions of this report. This applies particularly comment the small stores where accounting methods are faulty and records meagre.

While averages are used to describe the relation of general expense to total net sales, stores are not treated for this purpose as though they were all of the same size. They are grouped according to amounts of net sales, and averages are calculated for each group. The individual groupaverages for each year more nearly approximate the conditions obtaining in each store than does the average for all of the stores treated as a whole.

But averages alone, under conditions in which there is a wide range of relations for individual stores, do not accurately describe the common or customary condition. They are too much affected by extremes. Something more is needed to express the characteristic feature, and while it is impossible in this report to set out the ratios for each store, they can be

grouped so as to show the variations which are present. A grouping of the amounts, for the stores shown in the lower portion of Table 5, is given in the upper portion of Table 25. It shows that the average \$4.81, for stores with sales under \$40,000 in 1919, is made up of amounts as low as under \$1 and as high as \$10 and over. Similar variations obtain for stores with larger sales. For instance, while the average amount of general expense per \$100 of total net sales

for stores having sales between \$40,000 and \$80,000 in this year is \$4.49, the most common amount is between \$3 and \$4. Seventy-three or 54.5 per cent. of the total number of stores of this size—134—have amounts between \$3 and \$6. Similar differences are found for the larger stores—the range extending from under \$1 to \$10 and more, with no clearly defined common or modal tendency showing itself. Most, if not all of the high and low amounts, are

TABLE 4

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100

OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE,

1919, 1918, AND 1914, COMBINED

	Sto	res Reporting o	n General Exp	ense	Ratio Which Amount of General Expense per \$100 of Total Net Sales	
Classified Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Stores of Different Size, is of the Amount for All Stores Per Cent.	Per Cent.
Total (Average)	834	\$75,296,785	\$4,103,875	\$5.46		100.0
Under \$20	45	704,145	45,264	6.43		117.8
\$20 to \$40	209	6,346,296	310,197	4.89		89.6
\$40 to \$60	181	8,963,774	401,603	4.48		82.
\$60 to \$80	124	8,617,450	465,984	5.41		99.
\$80 to \$100	72	6,498,569	280,974	4.32		79.
\$100 to \$140	85	9,966,778	556,300	5.58		102.
\$140 to \$180	42	6,705,461	320,249	4.78		87.
\$180 to \$220	23	4,548,075	216,917	4.77		87.
\$220 to \$300	22	5,749,888	330,463	5.75		105.
\$300 to \$500	21	7,966,862	528,746	6.64		121.0
\$500 & over	10	9,139,487	647,178	7.08		129.
Under \$40	254	7,050,441	355,461	5.04		92.
\$40 to \$80	305	17,581,224	867,587	4.93		90.3
\$80 to \$180	199	23,170,808	1,157,523	5.00		91.
\$180 & over	76	27,404,312	1,723,304	6.29		115.9

accounted for by the inclusion of stores reporting either extremely high or low ratios. If these stores are eliminated, one may conclude with reasonable accuracy that the amount of general expense per \$100 of total net sales is approximately \$5 for all stores when treated as a total, and that the amounts vary directly with the size of stores.

The relations between general expense and total net sales for stores classified by size, for the three years combined, are shown in Table 4.

The average amount of general expense per \$100 of total net sales for stores for the three years 1919, 1918, and 1914, combined, is \$5.46. This average is based upon an experience of 834 store-years, \$75,206,785 of net sales and \$4,103,875 of general expense. For the groups of stores with sales less than \$180,000, the amounts are erratic. For the stores with sales less than \$60,000, they seem to decrease with stores of increasing sales. For those with annual sales between \$60,000 and \$180,000, no

TABLE 5

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919

Classified	Stor	es Reporting or	General Exp	erise	Ratio Which Amount of General Expense per \$100 of Total Net Sales	
Total Not Sales (in 000's)	Mumber	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Stores of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	351	\$40,041,903	\$2,064,274	\$5.16		100.0
Under \$20	3	44,148	4,040	9.15		177.3
\$20 to \$40	56	1,747,168	82,043	4.70		91.1
\$40 to \$60	78	3,851,218	153,951	4.00		77.5
\$60 to \$80	56	3,886,245	193,775	4.99		96.7
\$80 to \$100	38	3,468,787	134,464	3.88		75.2
\$100 to \$140	49	5,899,376	301,305	5.11		99.0
\$140 to \$180	24	3,831,313	177,734	4.64		89.9
\$180 to \$220	13	2,580,912	110,768	4.29		83.1
\$220 to \$300	14	3,674,458	196,088	5.34		103.5
\$300 to \$500	13	4,930,928	261,413	5.30		102.7
\$500 & over	7	6,127,350	448,693	7.32		141.9
Under \$40	59	1,791,316	86,083	4,81		93.2
\$40 to \$80	134	7,737,463	347,726	4.49		87.0
\$80 to \$180	111	13,199,476	613,503	4.65		90.1
\$180 & over	47	17,313,648	1,016,962	5.87		113.8

definite tendency is revealed. For large stores—those with sales of \$180,000 and over—the amounts clearly increase with the size of store. This is the situation when the stores are broken up into a number of classes and the tendencies indicated from group to group. When the whole range of sizes is considered, however, for the purpose of generalizing for all stores, the amounts of general expense per \$100 of total net sales undoubtedly become larger as stores increase their sales.

The details for the three years, considered separately, are similar to those for the combined period. For 1919, when the stores are classified into wider sales-groups, the lowest amount is \$4.49 and the highest \$5.87. When they are considered by minor differences in size, the 1919 ratios closely correspond in direction of change with those for the three years combined. This year, however, does not as satisfactorily reveal the tendency to change from store-group to store-group, in the relation of gen-

OTAL NET SALES GENERAL EXPENSE AND AMOUNT OF GENERAL EXPENS

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1918

TABLE 6

Classified	Sto	res Reporting o	on General Ex	pense	Ratio Which Amount of General Expense per \$100 of Total Net Sales	
Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Stores of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	305	\$25,204,990	\$1,474,180	\$5.85		100.0
Under \$20	18	300,454	20,453	6.81		116.4
\$20 to \$40	85	2,592,549	129,984	5.01		85.6
\$40 to \$60	65	3,221,070	160,591	4.99		85.3
\$60 to \$80	48	3,363,212	181,032	5.38		92.0
\$80 to \$100	26	2,310,831	112,381	4.86		83.1
\$100 to \$140	26.	2,962,317	176,302	5.95		101.7
\$140 to \$180	13	2,058,703	114,404	5.56		95.0
\$180 to \$220	7	1,386,406	78,422	5.66		96.8
\$220 to \$300	В	2,075,430	134,375	6.47	-	110.6
\$300 to \$500	7	2,679,984	212,863	7.94		135.7
\$500 & over	2	2,254,034	153,373	6.80		116.2
Under \$40	103	2,893,003	150,437	5.20		88.9
\$40 to \$80	113	6,584,282	341,623	5.19		88.7
\$80 to \$180	65	7,331,851	403,087	5.50		94.0
\$180 & over	24	8,395,854	579,033	6.90		117.9

eral expense to net sales, as does 1918. In the latter, with minor exceptions, the nature of the change in the amounts, from small to large stores, is direct. That is, increase in sales brings increase in the proportion which general expense bears to sales—the ratios varying from \$4.86 as a minimum to \$7.94 as a maximum, when the stores are narrowly grouped. With a broader classification, the minimum is \$5.19 and the maximum, \$6.91.

The reports on general expense are

less satisfactory for 1914 than for either 1919 or 1918. Fewer stores reported and the data supplied are less satisfactory. For some of the storegroups, no reports at all were received, while for others the data are too few to be used for purposes of generalization. For the groups for which a number of stores reported, the ratios follow closely those for the other years, and when all of the stores are classified into a few groups, the direction of change for this year is the same as that for 1919 and 1918.

TABLE 7

TOTAL NET SALES, GENERAL EXPENSE, AMOUNT OF GENERAL EXPENSE PER \$100

OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1914

	Store	es Reporting o	on General E	xpense	Ratio Which Amount of General Expense per \$100 of Total Net Sales	
Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Stores of Different Size, is of the Amount for All Stores Per Cent. O 30 60 90 120 150 180	Per Cent.
Total (Average)	178	\$9,959,892	\$565,421	\$5.68		100.0
Under \$20	24	359,543	20,771	5.78		101.8
\$20 to \$40	68	2,006,579	98,170	4.89		86.1
\$40 to \$60	38	1,891,486	87,061	4.60		81.0
\$60 to \$80	20	1,367,993	91,177	6.67		117.4
\$80 to \$100	8	718,951	34,129	4.75		83.6
\$100 to \$140	10	1,105,085	78,693	7.12		125.4
\$140 to \$180	5	815,445	28,111	3.45		60.7
\$180 to \$220	3	580,757	27,727	4.77		84.0
\$220 to \$300	-	-	-	-		-
\$300 to \$500	1	355,950	54,470	15.30		269.4°
\$500 & over	1	758,103	45,112	5.95		104.8
Under \$40	92	2,366,122	118,941	5.03		88.6
\$40 to \$80	58	3,259,479	178,238	5.47		96.3
\$80 to \$180	23	2,639,481	140,933	5.34		94.0
\$180 & over	5	1,694,810	127,309	7.51		132.2

Full length of line not shown

TABLE 8

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100
OF TOTAL NET SALES, FOR 194 IDENTICAL STORES CLASSIFIED
BY SIZE, 1919, 1918, AND 1914

Classified Total Net Sales	Years	Number		Total	- Ge	neral 1	Exper	nse p	er \$1	L00 o	£	
(in 000's)		of Store- years	Total Net Sales	General Expense	Actual	ρ \$1	\$2		aphic		6 \$7	#8
	Total (Average)	582	\$51,673,433	\$2,887,215	\$5.59	-		_				
Total	1919	194	24,330,739	1,310,170	5.38	-	=	_		-		
(11100 - 201)	1918	194	16,910,205	998,879	5.91							
	1914	194	10,432,489	578,166	5.54				_			
	Total (Average)	191	5,159,989	262,167	5.08	_	-			-		
Under \$40	1919	28	828,915	40,691	4.91			_	_			
	1918	62	1,750,480	94,500	5.40							
	1914	101	2,580,594	126,976	4.92			-				
	Total (Average)	214	12,291,128	585,261	4.76	-	-		-			
\$40 to \$80	1919	71	4,203,792	184,386	4.39		-					
	1918	78	4,569,732	217,827	4.77							
	1914	65	3,517,604	183,048	5.20			_	_	-		
	Total (Average)	130	14,757,405	759,646	5.15	-				-		
80 to \$180	1919	69	7,879,281	371,354	4.71			-	_			
	1918	38	4,238,643	247,459	5.84					-		
	1914	23	2,639,481	140,833	5.34				_	-		
	Total (Average)	47	19,464,911	1,280,141	6.58	-		-	-	- /-	-	
180 & over	1919	26	11,418,751	713,739	6.25	-			- 24			
	1918	16	6,351,350	439,093	6.91							
	1914	5	1,694,810	127,309	7.51			She			die	

The relations of general expense to total net sales in stores of different size for 1919, 1918, and 1914 are shown in Tables 5, 6, and 7.

A similar comparison may be made for 194 identical stores which reported both their general expense and their total net sales for each of the three years. When these stores are classified by size, as in Tables 8 to 11, inclusive, the number in each salesgroup varies from year to year because the position of each store depends upon the amount of its sales for the year in question.

The average amount of general expense per \$100 of total net sales for

the 194 stores is \$5.59 for the three years combined; \$5.38 for 1919; \$5.91 for 1918; and \$5.54 for 1914. That is, the amounts of general expense per \$100 of total net sales for these

TABLE 9

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR 194 IDENTICAL STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914, COMBINED

	Sto	res Reporting o	Ratio Which Amount of General Expense per \$100 of Total Net Sales for				
Classified Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total General Expense per \$100 Expense of Total Per Cent.		194 Identical Stores of Different Size, is of the Total Amount Per Cent.	Per Cent.	
Total (Average)	582	\$51,673,433	\$2,887,215	\$5.59		100.0	
Under \$40	191	5,159,989	262,167	5.08		90.9	
\$40 to \$80	214	12,291,128	585,261	4.76		85.2	
\$80 to \$180	130	14,757,405	759,646	5.15		92.1	
\$180 & over	47	19,464,911	1,280,141	6.58		117.7	

TABLE 10

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR 194 STORES CLASSIFIED BY SIZE, 1919

03-0-101-1	Sto	res Reporting o	n General Exp	ense	Ratio Which Amount of General Expense per \$100 of Total Net Sales		
Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for 194 Stores of Dif- ferent Size, is of the Total Amount	Per Cent.	
Total (Average)	194	\$24,330,739	\$1,310,170	\$5.38		100.0	
Under \$40	28	828,915	40,691	4.91		91.3	
\$40 to \$80	71	4,203,792	184,386	4.39		81.6	
\$80 to \$180	69	7,879,281	371,354	4.71		187.5	
\$180 & over	26	11,418,751	713,739	6.25		116.2	

Average \$5.38

identical stores are not different by more than a few cents for each year from the corresponding amounts shown in Table 1 for a varying number of stores. The same type of change between 1914 and 1918—that is, an increase—commented on above, again appears. Moreover, the direction of change—a decrease—between 1918 and 1919, characterizes these same stores as it did those which were different in number from year to year.

Table 8, however, shows that the change in the ratios from year to year, for all of the stores combined, does not hold for stores of different size. In the smallest stores—those with yearly sales less than \$40,000—and in those with annual sales between \$80,000 and \$180,000, an increase in 1918 over 1914 is followed by a decrease in 1919 compared with 1918. That is, both store-groups have the

same changes by which the total of all characterized. For the stores is groups with annual sales between \$40,000 and \$80,000, and \$180,000 and over, a decrease is characteristic of both 1918 and 1919 compared with 1914. In spite of this, however, the changes from year to year, which characterize identical as well as varying stores in the aggregate, lend support to the generalization that there is, in fact, an increase followed by a decrease in the ratios of general expense to total net sales, in the period under review; and that in spite of the uncertainties of the use of an average figure for characterizing series which differ so radically from store to store, the direction, if not the amount of change, is indicated in this manner.

When stores of different size—yet the same stores from year to year are compared according to the relation of general expense to total net

TABLE 11

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR 194 STORES CLASSIFIED BY SIZE, 1918

	Stor	es Reporting or	n General Exp	Ratio Which Amount of General Expense per \$100 of Total Net Sales for		
Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	194 Stores of Different Size, is of the Total Amount	Per Cent.
Total (Average)	194	\$16,910,205	\$998,879	\$5.91		100.0
Under \$40	62	1,750,480	94,500	5.40		91.4
\$40 to \$80	78	4,569,732	217,827	4.77		80.7
\$80 to \$180	38	4,238,643	247,459	9.84		98.8
\$180 & over	16	6,351,350	439,093	6,91		116.9

Average \$5.91

sales, the actual amounts do not differ widely from those shown for varying numbers of stores in Tables 4, 5, 6, and 7. In general, the amounts increase with the size of stores in this case as they did in the previous comparison. For each year, separately, and for all of the years combined, the ratios are smallest for stores with sales between \$40,000 and \$80,000 and highest for those with sales of \$180,000 and over. This tendency, too, is in general the same as that observed in the comparison of stores by size for a varying number of stores.

The relations of general expense to total net sales for 194 identical stores

for each of the three years are shown in Tables 9 to 12, inclusive. It should be remembered that from year to year the stores are the same. This does not mean, however, that the same stores are found in a given salesgroup from year to year. That this is true is evident from the data in the tables. In the group with sales less than \$40,000, there were 101 stores in 1914, By 1919, this number had shrunk to 28. Similarly, in the group with sales of \$180,000 and over, there were 5 stores in 1914, but by 1919, this number had grown to 26. Changes between 1914 and 1919 were likewise taking place in the other stores.

TABLE 12

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR 194 STORES CLASSIFIED BY SIZE, 1914

Classified	Sto	res Reporting o	n General Ex	Ratio Which Amount of Gen- eral Expense per \$100 of Total Net Sales for 194		
Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	Stores of Different Size, is of the Total Amount	Per Cent.
Total (Average)	194	\$10,432,489	\$578,166	\$5.54		100.0
Under \$40	101	2,580,594	126,976	4.92		88.8
\$40 to \$80	65	3,517,604	183,048	5.20		93.9
\$80 to \$180	23	2,639,481	140,833	5.34		96.4
\$180 & over	5	1,694,810	127,309	7.51		135.6

Average \$5.54

B.—Yearly Amounts of General Expense per \$100 of Total Net Sales for Stores Classified by Size of City in Which Located,* 1919, 1918, and 1914.

The discussion of rents and wages and salaries seemed to require that stores be classified by the size of the cities in which they are located in comparing the amounts expended for these purposes in terms of net sales. Rents, other things being equal, are undoubtedly higher in large than in small cities. This fact is perfectly evident and might have been assumed in the absence of any study whatsoever. That rents are higher in terms of net sales in large than in small cities, however, could hardly have

* Population figures are for 1920.

been arrived at, and certainly could not have been measured, without testing the data at hand. The same comments apply with almost equal cogency to expenditures for wages and salaries. The discussion in Volume II showed unmistakably that wage and salary payments are larger per \$100 of net sales in large than in small stores. They are also larger in terms of net sales for stores of the same size in large than in small cities. Do the same relationships hold for payments for general expense?

The foregoing discussion shows that the ratios of general expense to total net sales are higher in large than they are in small stores, and since the proportion of the large stores included in this study is greater in large cities than in small cities, it

TABLE 13

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100
OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF
CITY, 1919, 1918, AND 1914, COMBINED

	Sto	res Reporting o	n General Exp	ense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Net Sales for Stores					
(in 000's)	Number of Store- years	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	in Cities of Different Size, is of the Amount for All Stores	Per Cent,				
Total (Average)	834	\$75,206,785	\$4,103,875	\$5.46		100.0				
Under 10	384	18,573,185	836,390	4.50		82.4				
10 to 20	120	9,078,618	490,460	5,40		98.9				
20 to 40	119	11,409,788	556,923	4.88		89.4				
40 to 120	113	14,909,621	787,572	5.28		96.7				
120 to 200	41	7,781,444	390,884	5.02		91.9				
200 to 440	33	7,622,770	400,182	5.25		96.2				
440 & over	24	5,831,359	641,464	11.00		201.5				

would seem to follow that the amounts of general expense per \$100 of total net sales would be higher in large than in small cities. But how much higher? In spite of the unequal proportion of small and large stores in small and large cities, in the samples studied, and notwithstanding the uncertainties of the expression "general expense" in the reports of some of the stores, the question asked immediately above seems to be worthy of an answer. It should be remembered that the amount of general expense, as such, is not the point to be determined. What is under review is the relation of this amount to total net sales-both factors varying for stores under consideration, and both probably influenced by store location, and certainly by the years studied.

Table 13 shows the ratios of gen-

eral expense to total net sales for 834 store-years, for the years 1919, 1918, and 1914, combined; the stores, irrespective of size, being grouped according to the population of the cities in which they are located. An inspection of the table reveals the interesting fact that for stores in cities with population between 10,000 and 440,000, the amounts of general expense per \$100 of total net sales are essentially constant. The average amount for the 24 stores in cities with population of 440,000 and over is clearly an exception, and may be explained in part by the inclusion within this group of two stores which had amounts in excess of \$20 per \$100 of total net sales. Similar excesses for this group of stores for each of the years 1919, 1918, and 1914 may be explained in the same man-

TABLE 14

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1919

	Sto	res Reporting o	on General Ex	pense	Ratio Which Amount of General Expense per \$100 of Total Net Sales for Stores in	
Size of City (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	Cities of Different Size, 1s of the Amount for All Stores Per Cent.	Per Cent.
Total (Average)	351	\$40,041,903	\$2,064,274	\$5.16		100.0
Under 10	163	9,854,869	418,122	4.24		82.2
10 to 20	50	4,914,275	247,120	5.03		97.5
20 to 40	50	5,966,039	275,069	4.61		89.3
40 to 120	48	8,177,122	409,018	5.00		96.9
120 to 200	16	4,021,020	197,205	4.90		95.0
200 to 440	14	3,823,761	195,721	5.12		99.2
440 & over	20	3,284,817	322,019	9.80		189.9

ner. In this respect, general expenses do not follow the tendency so conspicuously shown for rents and for wages and salaries. This is surprising in view of the fact that the amounts do increase with the size of the stores, and that the proportion of large stores in large cities is greater than it is in small cities. Some other factor seems to be present to explain this condition. What it is, we shall see later when the ratios between general expense and sales are determined for stores classified both by size and by size of city.

While the stores for the three

TABLE 15

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1918

	Stor	es Reporting or	General Exp	ense	Ratio Which Amount of Gen- eral Expense per \$100 of
Size of City (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	Total Net Sales for Stores in Cities of Different Size, 1s of the Amount for All Stores Per Cent. p 30 60 90 120 150 180 210
Total (Average)	305	\$25,204,990	\$1,474,180	\$5.85	100.0
Under 10	139	6,036,030	287,004	4.75	81.2
10 to 20	45	3,105,645	181,094	5.83	99.7
20 to 40	42	3,765,858	198,073	5,26	89.9
40 to 120	42	4,963,903	289,314	5.83	99.7
120 to 200	15	2,636,781	135,291	5.13	67.7
200 to 440	12	2,735,480	149,789	5.48	93.7
440 & over	10	1,961,293	233,615	11.91	203.6

Average \$5.85

years, averaged, show neither a tendency for the ratios to increase nor decrease with the size of city, they may respond differently when the years are treated separately. What are the facts? Tables 14, 15, and 16 answer this question. In each of them, the ratios are essentially constant from city-group to city-group for the same year, but are erratic from year to year for cities of the same size.

The conclusion from the discussion of the ratios of general expense to total net sales, for stores classified solely by the size of the cities in which they are located, is that the amounts show neither a well-defined tendency to increase nor to decrease with the size of cities, in spite of the fact that the ratios do increase with the size of stores, and that the large cities have a larger proportion of large than of small stores. Averages, therefore,

in this instance are doubtful measures of true tendencies because of the variety of conditions which affect the data used.

How different the 351 stores, included in Table 14, are in the relations which obtain between general expense and total net sales is shown in Table 17, where the numbers of stores having classified amounts of general expense per \$100 of total net sales are given for cities of different

size. In spite of the wide variations in the amounts and the number of stores reporting them, the use of averages in this case does reflect the condition which it implies, even if it does not fully describe all of the variations. For some purposes averages suffice; for others, the differences from an average are indispensable. Table 17 is introduced in support of Table 14 and the comments made concerning it.

TABLE 16

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100
OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1914

	Sto	res Reporting	on General	Expense	Ratio Which Amount of General Ex- pense per \$100 of Total Net Sales	
Size of City (in 000's) Number	Total Not Sales	Total General Expense	General Expense per \$100 of Total Net Sales	for Stores in Cities of Different Size, is of the Amount for All Stores Per Cent. 0 30 60 90 120 150 180 210 240 27	Per Cent.	
Total (Average)	178	\$9,959,892	\$565,421	\$5.68		100.0
Under 10	82	2,682,286	131,264	4.89		86.1
10 to 20	25	1,058,698	62,246	5.88		103.5
20 to 40	27	1,677,891	83,781	4.99		87.9
40 to 120	23	1,768,596	89,240	5.05		88.9
120 to 200	10	1,123,643	58,388	5.20		91.5
200 to 440	7	1,063,529	54,672	5.14		90,5
440 & over	4	585,249	65,830	24.67		258.5

Average \$5.68

The number of stores, classified by size of city in which they are located, as given in Tables 13, 14, 15, and 16, changed from year to year. This fact may explain in part the differences in the ratios of general expense to total net sales for the years studied. If all of the stores which reported their sales and general expense for each of

the three years 1919, 1918, and 1914, are divided into two groups according to the size of city in which they are located, the difference in the ratios from year to year for the same stores may be studied, and any effect due to the size of the city be observed. Tables 18, 19, and 20 are designed with this object in mind.

TABLE 17

NUMBER OF STORES REPORTING SPECIFIED AMOUNTS OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, CLASSIFIED BY SIZE OF CITY, 1919

Size	Nu	mber of General	Sto Exp	res	Repo	rtin \$10	g Cl O of	assi Tot	fied al N	Amo et S	unts ales	of
of City (in 000's)	Total	Under \$1	\$1 to \$2	\$2 to \$3	\$3 to \$4	\$4 to \$5	\$5 \$6	\$6 \$0 \$7	\$7 to \$8	\$8 to \$9	\$9 to \$10	\$10 & over
Total	351	7	27	5 5	69	58	55	32	18	9	6	15
Under 10	163	2	16	26	34	33	21	11	11	3	1	5
10 to 20	50	2	3	10	7	3	11	6	2	2	1	3
20 to 40	50	1	4	6	14	7	7	4	3	-	3	1
40 to 120	48	1	3	6	5	8	11	7	1	3	-	3
120 to 200	16	-	1	4	4	1	2	2	-	1	1	-
200 to 440	14	1	-	1	4	2	2	2	1	-	-	1
440 & over	10	-	-	2	1	4	1	-	-	-	-	2

TABLE 18

RELATION OF GENERAL EXPENSE TO TOTAL NET SALES FOR 194 STORES CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

			Total N	et Sales		General-Expense				
Size of City	Years	Number		Average Amount per Store		Total	Average per S	Amount tore	Per \$100 of Total Net Sales	
(in 000's)		Stores	Total Amount	Amount	Per Cent. Increase over 1914	Amount	Amount	Per Cent. Increase over 1914	Amount	Per Cent. Increase or Decrease
	1919.	194	\$24,330,739	\$125,416	133.2	\$1,310,170	\$6,753	126.6	\$5.58	-2.9
Total	1916	194	16,910,205	87,166	62.1	. 998,879	5,149	72.8	5.91	+6.7
	1914	194	10,432,489	53,776		578,166	2,980		5.54	
	1.919	147	11,926,495	81,133	106.4	554,042	3,769	92.4	4.65	-6.6
Under 40	1918	147	8,559,106	58,225	48.1	442,835	3,012	53.8	5.17	+3.8
	1914	147	5,779,545	39,317		287,947	1,959		4.98	
	1919	47	12,404,244	263,920	166.6	756,128	16,088	160.5	6.10	-2.2
40 and	1918	47	8,351,099	177,685	79.5	556,044	11,831	91.6	6.60	+6.7
	1914	47	4,652,944	98,999		290,219	6,175		6.24	

TABLE 19

TOTAL GENERAL EXPENSE AND AVERAGE GENERAL EXPENSE PER STORE FOR 194 IDENTICAL STORES, CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

Size		Stores Expense	Reporting on for Each of	General the Years	Ratio Which Amount of General Ex- pense per Store for Each Year, is of Average for the Three Years	
of City (in 000's)	Years	Number of Store- years	Total General Expense	Average General Expense per Store	Per Cent. 9 40 80 120 160 200 240 280 320 360	Per Cent.
	Total (Average)	582	\$2,887,215	\$4,961		100.0
Total	1919	194	1,310,170	6,753		136.1
	1918	194	998,879	5,149		103.8
	1914	194	578,166	2,980		60.1
	Total (Average)	441	1,284,824	2,913		58.7
Under 40	1919	147	554,042	3,769		76.0
•	1918	147	442,835	3,012		60.7
	1914	147	287,947	1,959		39.5
	Total (Average)	141	1,602,391	11,364		229.1
40 and	1919	47	756,128	16,088		324.3
	1918	47	556,044	11,831		238.5
	1914	47	290,219	6,175		124.5

Average \$4,961

General expense per store increased for 147 stores in small cities from \$1,959 in 1914 to \$3,769 in 1919 or by 92.4 per cent. The corresponding increase for 47 stores in large cities was from \$6,175 to \$16,088 or by 160.5 per cent. During this same period, however, the average sales per store, for the 147 stores in the small cities, increased from \$39,317 to \$81,133 or by 106.4 per cent. For the 47 stores in the large cities the corresponding increase was from \$98,999 to \$263,920, or by 166.6 per cent. Summarized, this means that both sales and general expense in

both groups of cities increased rapidly during this period. But sales increased the more rapidly, the net effect being that general expense in terms of sales decreased. This decrease between 1914 and 1919 for the stores in the small cities was 6.6 per cent.; for the stores in the large cities, it was 2.2 per cent.

Moreover, in both city-groups sales and general expense per store increased between 1914 and 1918. In this period, however, general expense increased more than sales, the consequence being that general expense in terms of sales *increased*. For the

TOTAL NET SALES, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 194 IDENTICAL STORES, CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

		Stor	es Reporting on	General Exp	ense	Ratio Which Amount of General Expense per \$100 of Total Net Sales for	
Size of City (in 000's)	Years	Number of Store- years	Total Not Sales	Total General Expense	General Expense per \$100 of Total Net Sales	Each Year, is of the Amount for All Years Per Cent. Q 20 40 60 80 100 120	Per Cent
	Total (Average)	582	\$51,673,433	\$2,887,215	\$5.59		100.
Total (Average)	1919	194	24,330,739	1,310,170	5.38		96.
	1918	194	16,910,205	998,879	5.91		105.
	1914	194	10,432,489	578,166	5.54		99.
	Total (Average)	441	26,265,146	1,284,824	4.89		87.
Under 40	1919	147	11,926,495	554,042	4,65		83.
	1918	.147	8,559,106	442,835	5.17		92.
	1914	147	5,779,545	287,947	4.98		89.
	Total (Average)	141	25,408,287	1,602,391	6.31		112.
40 and	1919	47	12,404,244	756,128	6,10		109.
	1918	47	8,351,099	556,044	6.66		119.
	1914	47	4,652,944	290,219	6.24		111.

Average \$5.59

small cities the amount of increase was 3.8 per cent., while in the larger cities it was 6.7 per cent.

Summarizing the above paragraphs, it may be said that when two groups of stores, located in different sized cities, are compared from year to year, those in the large cities show greater increases in both sales and general expense per store than do those in small cities, and that between 1914 and 1919 general expense in terms of total net sales fell almost 3 times as much relatively in small

cities as it did in large cities, while, during the period, 1914 to 1918, it rose in small cities slightly less than half as much as it did in large cities.

Tables 18, 19, and 20 show the amounts of sales and general expense per store, together with the amount and increase or decrease of general expense per \$100 of total net sales between 1914, 1918, and 1919 for identical stores classified by the size of the city in which they are located. A study of them is worth while.

C.—Yearly Amounts of General Expense per \$100 of Total Net Sales for Stores Classified by Size of Store and Size of City in Which Located,* 1919, 1918, and 1914.

In the discussion of Tables 4, 5, 6, and 7, the conclusion was reached that general expense per \$100 of total net sales in clothing stores increased slightly with the size of stores measured in terms of net sales. This tendency, however, was not so clear for general expense as it was for wages and salaries, and the caution

* Population figures are for 1920.

was voiced that the averages might be deceptive because of the uncertainties of the term "general expense" in the reports of the merchants and because of the limitations of averages in general.

In the comparison of the relation of general expense to sales for stores in different sized cities, the tendency for the amounts to increase with the size of cities was not encountered, and surprise concerning this was expressed, because the proportion of large stores—in which the ratio of

TABLE 21

TOTAL NET SALES, TOTAL GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR ALL STORES CLASSIFIED BY SIZE OF STORE AND SIZE OF CITY, 1919, 1918, AND 1914, COMBINED

Size	Classified	Sto	res Reporting of	n General Exp	ense	Ratio Which Amount of General Expense per \$100 of Total Net Sales for	
of City (in 000's)	Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	Stores of Different Size in Cities of Different Size, is of the Amount for All Stores 20 20 49 60 80 100 120	Per Cent.
	Total (Average)	834	\$75,206,785	\$4,103,875	\$5.46		100.0
Total	Under \$40	254	7,050,441	355,461	5.04		92.3
(Average)	\$40 to \$80	305	17,581,224	867,587	4.93		90.3
	\$80 to \$180	199	23,170,808	1,157,523	5.00		91.6
	\$180 & over	76	27,404,312	1,723,304	6.29		115.2
	Total (Average)	623	39,061,591	1,883,773	4.62		88.3
Under	Under \$40	230	6,311,852	322,314	5.11		95.6
40	\$40 to \$80	₽45	13,856,792	670,552	4.84		. 88.6
	\$80 to \$180	131	15,052,263	709,504	4.71		86.3
	\$180 & over	17	3,840,684	181,403	4.72		86.4
	Total (Average)	211	36,145,194	2,220,102	6.14		112.5
	Under \$40	24	738,589	33,147	4.49		82.2
40 and	\$40 to \$80	60	3,724,432	197,035	5.29		96.9
	\$80 to \$180	69	8,118,545	448,019	5.52		101.1
	\$180 & over	59	23,563,628	1,541,901	6.54		119.9

general expense to net sales is higher than in small stores—was greater in large than in small cities. This seeming anomaly may now be explained.

Table 21 shows, for the years 1919, 1918, and 1914, combined, the ratios of general expense to net sales for stores classified by size and by size of city in which they are located. Stores of all sizes in the small cities have an average ratio of \$4.82 between general expense and \$100 of total net sales, while those in large cities have a corresponding average

ratio of \$6.14. That is, there is a difference between the averages for the two city-groups of \$1.32. Moreover, the size of the ratios decreases with the size of stores in small cities, while it increases with the size of stores in large cities. It is the averaging of these reverse tendencies in the two city-groups which explains the constant relation in the ratios when the size of stores is ignored, and the stores are classified alone by the size of the cities in which they are located.

These differences for the city-

TABLE 22

TOTAL NET SALES, TOTAL GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND SIZE OF CITY, 1919

Siza	Classified	Sto	res Reporting o	n General Exp	ense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Net Sales for Stores			
of City (in 000's)	Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	of Different Size, in Cities of Different Size, is of the Amount for All Stores Per Cent. p 20 40 60 80 100 120			
	Total (Average)	351	\$40,041,903	\$2,064,274	\$5.16		100.0		
Total	Under \$40	59	1,791,316	86,083	4.81		93.2		
(Average)	\$40 to \$80	154	7,737,463	347,726	4.49		87.0		
	\$80 to \$180	111	13,199,476	613,503	4.65		90.1		
	\$180 & over	47	17,313,648	1,016,962	5.87		113.8		
	Total (Average)	263	20,735,183	940,311	4.53		87.8		
Under	Under \$40	55	1,678,228	80,001	4.77		92.4		
40	\$40 to \$80	116	6,605,520	303,942	4.60		89.1		
	\$80 to \$180	78	9,245,151	413,218	4.47		86.6		
	\$180 & over	14	3,206,284	143,150	4.46		86.4		
	Total (Average)	88	19,306,720	1,123,963	5.82		112.8		
40 and	Under \$40	4	113,088	6,082	5.38		104.3		
CVST	\$40 to \$80	18	1,131,943	43,784	3.87		75.0		
	\$80 to \$180	33	8,954,325	200,285	5.06		98.1		
	\$180 & over	33	14,107,364	873,812	6.19		120.0		

Average \$5.16

groups of different size are not brought about by averaging the three years; they obtain, with minor exceptions, for each of the years when treated separately. Not only is the amount of general expense per \$100 of total net sales larger for stores in the larger cities, when all stores are treated as a whole, but the amount for each sized store is larger, with the exception of stores with sales less than \$40,000. This generalization is based upon a consideration of the three years' experience combined. It

does not hold for every store-group in each of the individual years.

So far as the city-groups are concerned, the same principle that was discovered for wages and salaries holds for general expense per \$100 of total net sales. General expense, in proportion to sales, is lower in small cities than it is in large cities. This is true for the stores when treated as one group and also, with one exception, when they are classified by the amounts of their total net sales. For the small stores, the amount of gen-

TABLE 23

TOTAL NET SALES, TOTAL GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND SIZE OF CITY, 1918

		Sto	res Reporting o	n General Exp	ense .	Ratio Which Amount of General Expense per \$100 of Total Net Sales for Stores	
Size of Gity (in 000's)	Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sale	Dow Court	Per Cent.
	Total (Average)	305	\$25,204,990	\$1,474,180	\$5.85		100.0
Total	Under \$40	103	2,893,003	150,437	5.20		88.9
(Average)	\$40 to \$80	113	6,584,282	341,623	5.19		88.7
	\$80 to \$180	55	7,331,851	403,087	5.50		94.0
	\$180 & over	24	8,395,854	579,035	6.90		117.9
	Total (Average)	226	12,907,533	666,171	5.16		88.2
Under	Under \$40	95	2,643,097	139,466	5.28		90.3
40	\$40 to \$80	86	4,907,517	241,948	4.93		8415
	\$80 to \$180	42	4,722,519	246,504	5.22	-	89.2
	\$180 & over	3	634,400	38,253	6.03		103.1
	Total (Average)	79	12,297,457	808,009	6.57		112.3
40 and	Under \$40	8	249,906	10,971	4.39		75.0
over	\$40 to \$80	27	1,676,765	99,675	5.94		101.5
	\$80 to \$180	23	2,609,352	156,583	6.00		102.6
	\$180 & over	21	7,761,454	540,780	6.97		119.1

Average \$5.85

eral expense per \$100 of total net sales is higher for small than for large cities. For the stores with sales of more than \$40,000, general expense, in proportion to sales, is higher in large than in small cities.

Tables 22, 23, and 24 show not only the total net sales and general expense, but also the ratios of general expense to total net sales for stores classified by size, by years, and by the size of the city in which they are located.

It appears to be neither necessary

nor practicable to publish for each of the years under consideration the number of stores which had different ratios of general expense to total net sales. The details for 1919 will suffice to show the different classified amounts, and to indicate how fully the various averages characterize the actual ratios for this year. Even in this table the amounts are grouped, the only other alternative to combining them being to list the stores individually. Obviously this is impracticable. Table 25 is instructive

TABLE 24

TOTAL NET SALES, TOTAL GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND SIZE OF CITY, 1914

		St	eres Reporting	on General	Expense	Ratio Which Amount of General Expense per \$100 of Total Net Sales for Stores of Dif-	
Size of City (in 000's)	Classified Total Net Sales (in 000's)	Humber	Total Net Sales	Total General Expense	General Expense per \$100 of Total Net Sales	ferent Size in Cities of Different Size, is of the Amount for All Stores Per Cent.	Per Cent.
	Total (Average)	178	\$9,959,892	\$565,421	\$5.68		100.0
Total	Under \$40	92	2,366,122	118,941	5.03		88.6
(Average)	\$40 to \$80	58	3,259,479	178,238	5.47		96.3
	\$80 to \$180	23	2,639,481	140,933	5.34		94.0
	\$180 & over	5	1,694,810	127,309	7.51		132.2
	Total (Average)	134	5,418,875	277,291	5.12		90.1
Under	Under \$40	80	1,990,527	102,847	5.17		91.0
40	\$40 to \$80	45	2,343,755	124,662	5.32		93.7
	\$80 to \$180	11	1,084,593	49,782	4.59		80.8
	\$180 & over	•	•	•	•		
-	Total (Average)	44	4,541,017	288,130	6.35		111.8
40 and	Under \$40	12	375,595	16,094	4.28		75.4
OAGL	\$40 to \$80	15	915,724	53,576	5.85		103.0
	\$80 to \$180	12	1,554,888	91,151	5.86		103.2
	\$180 & over	. 5	1,694,810	127,309	7.51		132.2

in showing the range of amounts for the different stores as well as the common or modal ratios for stores classified by size and according to their location.

D.—Summary.

The discussion above and a study of the data upon which it is based lead to certain fairly well defined conclusions which may be stated as follows:

- (1) The amount of general expense per \$100 of total net sales increased between 1914 and 1918, and decreased between 1918 and 1919, notwithstanding the fact that over the whole period both general expense and net sales per store increased. This is true not only of a varying number of stores but also of the same stores.
- (2) The amounts of general expense per \$100 of total net sales increase directly with the size of stores when they are classified in wide groups, the amounts varying, for the average of the three years 1919, 1918, and 1914, from \$5.04 for the smallest stores to \$6.29 for the largest. Similar differences and tendencies are found for identical stores classified by size and by years.
- (3) The ratio of general expense to total net sales is not appreciably, if any, higher in

stores in large than in small cities when the store sizes are ignored. This is true, in spite of the fact that the ratios are higher in large than in small stores, and that the large cities studied have proportionately more of the large than of the small stores.

- (4) The ration of general expense to total net sales in the same stores in small cities—those under 40,000 population—decreased almost three times as much as it did for another group of identical stores located in large cities—those with population of 40,000 and over—during the period 1914 to 1919.
- (5) The amounts of general expense per \$100 of total net sales are larger for stores, when classified by size, in large than in small cities. In small cities, the ratios for stores decrease with the size of stores, while in large cities they increase with the size of stores.

2.—YEARLY AMOUNTS OF GENERAL EX-PENSE IN RELATION TO TOTAL EXPENSE, 1919, 1918, AND 1914.

Following the plan of treatment of expense ratios as given in Volume II for wages and salaries, it is worth while to express amounts of general expense in terms of total expense. Both are functions of increased busi-

TABLE 25

NUMBER OF STORES REPORTING CLASSIFIED AMOUNTS OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, CLASSIFIED BY SIZE OF CITY AND SIZE OF STORE, 1919

Size	Classified	Num	ber of Genera	Stor	es R	e pe	ting r \$1	Cla	ssif	ied tal	Amou Net	nts o	f
of City (in 000's)	Total Net Sales (in 000's)	Total	Under \$1	\$1 to \$2	\$2 to \$3	\$3 to \$4	\$4 to \$5	\$5 to \$6	\$6 to \$7	\$7 to \$8	\$8 to \$9	\$9 to \$10	\$10 & over
	Total	551	7	27	55	69	58	55	32	18	9	6	15
	Under \$40	59	3	4	7	10	11	.7	4	5	3	1	4
Total	\$40 to \$80	134	2	11	25.	29	22	22	10	8	1	2	4
	\$80 to \$180	111	2	9	17	23	50	17	12	2	3	2	4
	\$180 & over	47	-	3	8	7	5	9	6	3	2	1	3
	Total	263	5	23	42	55	43	39	21	16	5	5	9
	Under \$40	55	2	4	7	10	11	5	4	5	3	1	3
Under 40	\$40 to \$80	116	2	10	20	23	18	20	В	В	1	2	4
	\$80 to \$180	78	1	7	13	19	14	10	7	2	1	2	2
	\$180 & over	14	-	2	2	3	-	4	2	1	-	-	-
	Total	88	2	4	13	14	15	16	11	2	4	1	6
	Under \$40	4	1	-	ı	-		2	-	-	-	-	1
40 and	\$40 to \$80	18	-	1	3	6	4	2	2		-	-	-
	\$80 to \$180	33	1	2	4	4	6	7	5	-	2	-	5
	\$180 & over	33		1	6	4	5	5	4	2	2	1	3

ness, and it is interesting to observe the relation between them for different years and for different sized stores.

A.—Yearly Amounts of General Expense per \$100 of Total Expense, 1919, 1918, and 1914.

Out of every \$100 of total expense, as reported by clothing merchants,

the average amount of general expense for the three years 1919, 1918, and 1914, combined, was \$23.87. In 1919, this amount was \$23.92; in 1918, \$24.39; and in 1914, \$22.48. The amount increased by \$1.91 or 8.5 per cent. between 1914 and 1918, and decreased by \$0.47 or 1.9 per cent. between 1918 and 1919. Relatively, for these years, the direction of change of the ratios of general ex-

pense to total expense is the same as that for general expense to sales. During the whole period, and from year to year, both total and general expense per store increased, as did sales, but the rates of increase were in favor of general expense between 1914 and 1918, and in favor of total

expense between 1918 and 1919. Consequently, the ratios of general to total expense for the years were as indicated above.

General and total expense and the relation which they bear to each other are shown in Table 26 for the three years separately and combined.

TABLE 26

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE 1919, 1918, AND 1914

	Stor	res Reporting o	on General Exp	ense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Expense for All	
Years	Number of Store- years	Total Expense	Total General Expense	General Expense per \$100 of Total Expense		Per Cent.
Total (Average)	834	\$17,190,289	\$4,103,875	\$23.87		100.0
1919	351	8,631,293	2,064,274	23.92		100.2
1918	305	6,044,276	1,474,180	24.39		102.2
1914	178	2,514,720	565,421	22.48		94.2

Average \$23.87

B.—Yearly Amounts of General Expense per \$100 of Total Expense in Stores Classified by Size, 1919, 1918, and 1914.

General expense constitutes essentially a uniform proportion of total expense for stores of all sizes. In this respect the amount closely follows the condition observed for wages and salaries and is radically different from rent. Of course, both total and general expense increase with expanding business, but they vary in essentially

the same proportion. This is not true for individual stores doing widely different volumes of business, but it is true for the stores whose records are studied, when they are combined and treated as aggregates. Standards or norms can rarely be determined if individual experiences are isolated. It is only when they are combined that real tendencies emerge, and that one is able to characterize a group. Averages for this purpose are useful, but they must be regarded as averages and looked upon as significant

TABLE 27

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914, COMBINED

	Sto	ores reporting of	n General Exp	pense	Ratio Which Amount of General Expense per \$100 of Total Expense for Stores	
Classified Total Net Sales (in 000's)	Number of Store- years	Total Expense	Total General Expense	General Expense per \$100 of Total Expense	of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	834	\$17,190,289	\$4,103,875	\$23.87		100.0
Under \$20	45	176,212	45,264	25.69		107.6
\$20 to \$40	209	1,319,897	310,197	23.50		98.4
\$40 to \$60	181	1,751,665	401,603	22.93		96.1
\$60 to \$80	124	1,953,839	465,984	23.85		99.9
\$80 to \$100	72	1,354,141	280,974	20,75		86.9
\$100 to \$140	85	2,285,552	556,300	24.34		102.0
\$140 to \$180	42	1,531,286	\$20,249	20.91		87.6
\$180 to \$220	23	1,041,181	216,917	20.83		87.3
\$220 to \$300	22	1,423,837	330,463	23.21		97.2
\$300 to \$500	21	2,059,465	528,746	25.67		107.5
500 & cver	10	2,293,214	647,178	28.22		118.2
Under \$40	254	1,496,109	355,461	23.76		99.5
\$40 to \$80	305	3,705,504	867,587	23.41		98.1
\$80 to \$180	199	5,170,979	1,157,523	22.38		93.8
180 & over	76	6,817,697	1,723,304	25.28		105.9

Average \$23.87

only when groups rather than individual practices and conditions are being considered.

In spite of the limitations of averages in summarizing the divergent relations of general and total expense in stores of different size, the constant relation here shown seems to point to more than a chance relationship and to indicate a basic tendency at least for the stores studied. How fully this constant relationship holds for stores in general is not answered by the

data at hand, but the opinion is hazarded that the relationship would not be markedly different if the number of stores were greatly increased. It might even be more constant if the sampling were more complete.

Table 27 shows the relations of general expense to total expense for stores classified by total net sales, based upon the experience of the three years 1919, 1918, and 1914, combined. The average for stores of all sizes is \$23.87. The smallest ratio

TABLE 28

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY SIZE, 1919

	Stor	res Reporting	on General E	rpense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Expense for Stores	
Classified Total Not Sales (in 000's)	Number	Total Expense	Tota1 General Expense	General Expense per \$100 of Total Expense	Per Cent.	Per Cent.
Total (Average)	351	\$8,631,293	\$2,064,274	\$23.92		100.0
Under \$20	3	8,800	4,040	45.91		192.0
\$20 to \$40	56	326,566	82,043	25.12		105.0
\$40 to \$60	78	635,458	153,951	23.49		98.2
\$60 to \$80	56	776,484	193,775	24.96		104.3
\$80 to \$100	38	656,772	134,464	20.47		85.6
\$100 to \$140	49	1,235,829	301,305	24.38		101.9
\$140 to \$180	24	828,984	177,734	21.44		89.6
\$180 to \$220	1.3	535,730	110,768	20.68		86.5
\$220 to \$300	14	869,526	196,088	22.55		94.3
\$300 to \$500	13	1,190,215	261,413	21.98		91.8
\$500 & over	77	1,546,929	448,693	29.01		121.3
Under \$40	59	335,366	86,083	25.67		107.3
\$40 to \$80	134	1,431,942	347,726	24.28		101.5
\$80 to \$180	111	2,721,585	613,503	22.54		94.2
\$180 & over	47	4,142,400	1,016,962	24.55		102.6

Average \$23.92

for any group of stores is \$20.75, and the largest is \$28.22. Part of this difference is smoothed out if the stores are grouped in wider classes as in the lower part of the table. The lowest ratio then becomes \$22.38, and the highest, \$25.28.

In Tables 28, 29, and 30, the relations of general to total expense are shown for stores classified by size for each of the years 1919, 1918, and 1914.

It is interesting to compare, for the

three years, the ratios between these amounts for stores of the same size. For stores with annual sales under \$40,000, the average amount for the three years is \$23.76. In 1919, it was \$25.67; in 1918, \$24.48; and in 1914, \$21.78. That is, between 1914 and 1918 it increased by \$2.70, or by 12.4 per cent.; between 1918 and 1919 it increased by \$1.19, or by 4.9 per cent. For stores with annual sales between \$40,000 and \$80,000, the direction of change from 1914 to 1918, and from

TABLE 29

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY SIZE, 1918

	Stor	res Reporting	on General E	xpense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Expense for Stores	
Classified Total Net Sales (in 000's)	Number	Total Expense	Total General Expense	General Expense per \$100 of Total Expense	of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	305	\$6,044,276	\$1,474,180	\$24.39		100.0
Under \$20	18	74,763	20,453	27.36		112.2
\$20 to \$40	85	539,771	129,984	24.08		98.7
\$40 to \$60	65	677,682	160,591	23.70		97.2
\$60 to \$80	48	758,773	181,032	23.86		97.8
\$80 to \$100	26	543,011	112,381	20.70		84.9
\$100 to \$140	26	739,388	176,302	23.84		97.7
\$140 to \$180	13	500,564	114,404	22.86		95.7
\$180 to \$220	7	347,146	78,422	22.59		92.6
\$220 to \$300	8	554,311	134,375	24.24		99.4
\$300 to \$500	7	746,850	212,863	28.50		116.9
500 & over	2	562,017	153,373	27.29		111.9
Onder \$40	103	614,534	150,437	24.48		100.4
\$40 to \$80	113	1,436,455	341,623	23.78		97.5
\$80 to \$180	65	1,782,963	403,087	22.61		92.7
180 & over	24	2,210,324	579,033	26.20		107.4

Average \$24.39

1918 to 1919 was the same, although it was less marked than that for the smaller stores. Similar differences hold—with one exception—for the large stores when classified into two major groups.

In each of the years the amounts of general expense per \$100 of total expense for stores of different size remain surprisingly constant. Of course, rather large differences from the normal are encountered, but these are generally found for store-groups

for which few samples were available for study. The graphic parts of Tables 27 to 30, inclusive, throw both the similarities and the differences strongly into view.

In presenting the relation of general expense to total expense immediately above, all of the reporting areas of the United States are combined. Geographical differences in the relations, if any, are smoothed out in a general average. An analysis of stores, by the divisions of the coun-

TABLE 30

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY SIZE, 1914

Classified	Stor	res Reporting	on General E	xpense	Ratio Which Amount of Gen- eral Expense per \$100 of Total Expense for Stores	
Total Net Sales (in 000's)	Number	Total Expense	Total General Expense	General Expense per \$100 of Total Expense	of Different Size, is of the Amount for All Stores Per Cent. 0 50 60 90 120 150 180 2	Per Cent.
Total (Average)	178	\$2,514,720	\$565,421	\$22.48		100.0
Under \$20	24	92,649	20,771	22.42		99.7
\$20 to \$40	68	453,560	98,170	21.64		96.3
\$40 to \$60	38	418,525	87,061	20.80		92.5
\$60 to \$80	20	418,582	91,177	21.78		96.9
\$80 to \$100	а	154,358	34,129	22.11		98.4
\$100 to \$140	10	310,335	78,693	25.36		112.8
\$140 to \$180	5	201,738	28,111	13.93		62.0
\$180 to \$220	3	158,305	27,727	17.51		77.9
\$220 to \$300	•	-	-	-		-
\$300 to \$500	1	122,400	54,470	44.50		197.9
\$500 & over	1	184,268	45,112	24.48		108.9
Under \$40	92	546,209	118,941	21.78		1 96.9
\$40 to \$80	58	837,107	178,238	21.29		94.7
\$80 to \$180	23	666,431	140,933	21.15		94.1
\$180 & over	5	464,973	127,309	27.38		121.8

Average \$22.48

TABLE 31

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914, COMBINED

	Stor	res Reporting o	n General Exp	ense	Ratio Which Amount of General Expense per \$100 of Total Expense	
Geographical Divisions	Number of Store- years	Total Expense	Total General Expense	General Expense per \$100 of Total Expense		Per Cent.
Total (Average)	834	\$17,190,289	\$4,103,875	\$23.87		100.0
The East	122	2,139,042	467,769	21.87		91.6
The South	120	4,077,847	990,226	24.28		101.7
East North Central	252	4,527,004	1,100,600	24.31		101.8
West North Central	257	3,766,321	849,417	22.55		94.5
The West	83	2,680,075	695,863	25.96		108.8

Average \$23.87

TABLE 32

TOTAL EXPENSE, GENERAL EXPENSE, AND AMOUNT OF GENERAL EXPENSE PER \$100 OF TOTAL EXPENSE FOR STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914

		Sto	ores Reporting	on General Ex	pense	Ratio Which Amount of Gen- eral Expense por \$100 of Total Expense for All Di-	
Geographical Divisions	Years	Number of Store- years	Total Expense	Total General Expense	General Expense per \$100 of Total Expense	visions and for Each Di- vision, is for Each Year Based on the Average for All Years Per Cent. 0 20 40 60 80 100 120	Per Cent.
	Total (Average)	834	\$17,190,289	\$4,103,875	\$23.87		100.0
Total (Average)	1919	351	8,631,293	2,064,274	23.92		100.2
	1918	205	6,044,276	1,474,180	24.39		102.2
	1914	178	2,514,720	565,421	22.48		94.2
	Total (Average)	122	2,139,042	467,769	21.87		91.6
The East	1919	48	1,039,568	212,449	20.44		85.6
	1918	44	743,021	178,131	23.97		100.4
	1914	30	356,453	77,189	21.65		90.7
	Total (Average)	120	4,077,847	990,226	24.28		101.7
The South	1919	55	2,097,462	507,939	24.22		101.5
	1918	46	1,488,699	364,409	24.48		102.6
	1914	19	491,686	117,878	23.97		100.4
	Total (Average)	252	4,527,004	1,100,600	24.31		101.8
East North Central	1919	105	2,279,804	570,584	25.03		104.9
	1918	91	1,588,441	389,451	24.52		102.7
	1914	56	658,759	140,565	21.34		89.4
	Total (Average)	257	3,766,321	849,417	22.55		94.5
West North Central	1919	107	1,831,382	408,487	22.30		93.4
	1918	93	1,315,459	316,926	24.09		100.9
	1914	57	619,480	124,004	20.02		83.9
	Total (Average)	83	2,680,075	695,863	25.96		108.8
The West	1919	36	1,383,077	364,815	26.38		110.5
	1918	31	908,656	225,263	24.79		103.9
	1914	16	588,342	105,785	27.24		114.1

Average \$23.87

try.* shows that the relations are surprisingly constant for general expense, as they are for wages and salaries, when expressed in terms of total expense. Of course, the proportions of large and small stores in the different divisions, considered in this study, are not uniform, nor are the sizes of the cities in which stores are located the same. Either or both of these conditions alter the ratios between general and total expense, as indicated under Section I, and the surprising thing is that when stores of different size, located in cities of different size, are compared geographically, the relations between general and total expense so closely agree. Averages are always serviceable in giving a general picture, but they must not be expected to describe accurately all of the items out of which they are made.

Table 31 contrasts the ratios of general to total expense for the geographical divisions for the combined years 1919, 1918, and 1914.

Table 32 contrasts the ratios between general and total expenses, for the years separately, for each of the geographical divisions. While the ratios for the country as a whole are strikingly alike from year to year, a slight increase between 1914 and 1918 being followed by a small decrease between 1918 and 1919, neither the uniformity nor the direction of change for the totals holds—except for the South—when the sections are

considered separately. In view of the difference in the number, size, and city location of the stores from year to year, and from district to district, similarity could hardly be expected. The surprising thing is that there is even close agreement in the ratios. The value of such a table as 32 is solely to reflect in a general way the fact that the ratio of general to total expense approximates \$24 for each of the years and geographical districts studied.

C.—Summary.

- (1) The average amount of general expense per \$100 of total expense is \$23.87. The ratio between the two amounts increased between 1914 and 1918, and decreased between 1918 and 1919.
- (2) On the average the amount of general expense per \$100 of total expense is constant for stores of different size. This is true for all reporting divisions of the United States when combined, and strikingly approximated when the divisions are considered separately for the three years, and for 1919, 1918, and 1914, combined.
- 3.—YEARLY AMOUNTS OF SPECIFIED ITEMS OF GENERAL EXPENSE PER \$100 OF TOTAL NET SALES, 1919, 1918, AND 1914.

The part of the questionnaire used to secure from merchants the de-

^{*} The territorial limits of these divisions are shown in Volume I, p. 18.

tailed amounts of their general expense provides for 26 distinct items. In the following discussion comparisons are made between certain of the more important of these items and net sales for stores which reported both amounts. Distinction is made between stores of different size—measured in net sales—and between the years 1919, 1918, and 1914.

It is unnecessary to comment in detail on each of the tables. They are uniform in type for each of the expense items, the graphic parts making it easy to contrast stores of the same size for different years and stores of different size for the same year. It should be remembered that these comparisons cover only those stores which specifically reported both the details of general expense and their total net sales.

Table 33 shows the relations of the amounts of expenditures for light,

TABLE 33

RELATION OF EXPENDITURE FOR LIGHT, HEAT AND WATER TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	Classified	Store	es Reporting Ex Light, a		Heat,	Ratio Which Amount of Expenditure for Light, Heat, and Water per \$100 of Total Net Sales for	
Tears '	Total Net Sales (in 000's)	Humber of Store- years	Total Net Sales	Amount of Expenditure	Amount per 3100 of Total Net Sales	Stores of Different Size for Each Year, is of the Average for All Years Per Cent. 0 20 40 60 80 100 120 140 160	Per Cent.
	Total (Average)	717	\$59,172,759	\$330,188	\$0.56		100.0
Total	Under \$40	220	6,072,630	45,855	0.76		135.7
Average)	\$40 to \$80	270	15,573,604	102,532	0.66		117.6
	\$30 to \$180	266	19,587,605	104,402	0.53		94.6
	\$180 & over	61	17,938,920	77,400	0.43		76.8
-	Total (Average)	305	31,841,291	157,706	0.50		89.3
Under \$40	Under \$40	52	1,579,621	11,538	0.73		130.4
1919	\$40 to \$80	119	6,787,795	40,252	0.59		105.4
	\$80 to \$180	97	11,574,789	57,044	0.49		87.5
	\$180 & over	38	11,899,086	43,872	0.41		73.2
	Total (Average)	259	19,662,572	115,556	0,59		105.4
1918	Under \$40	89	2,480,107	19,326	0.78		139.3
Taro	\$40 to \$80	99	5,807,225	38,329	0.66		117.9
	\$80 to \$180	51	5,916,163	31,931	0.54		96.4
	\$180 & over	20	5,439,077	25,970	0.48		85.7
	Total (Average)	153	7,668,896	56,926	0.74		132.1
	Under \$40	79	2,012,902	14,991	0.74		132.1
1914	\$40 to \$80	53	2,978,584	23,951	0.80		142.9
	\$80 to \$130	18	2,096,653	15,426	0.74		132.1
	\$180 & over	3	580,757	2,558	0.44		78.6

heat and water to total net sales. The ratios of these factors decreased, between 1914 and 1919, from \$0.74 to \$0.50, or by 32.4 per cent. The average ratio for the three years combined, based upon 717 store-years, \$59,000,000 of total net sales, and \$330,000 of expenditure for the purposes in question, is \$0.56. Moreover, for each year—with a minor excep-

tion in 1914—and for the average of the three years, the amounts decrease as the size of the stores increases. For the three-year average, the decrease between the amounts for the largest and the smallest stores is 43.4 per cent. Similar decreases hold for the years separately. Interpreted, this means that sales between 1914 and 1919 increase more rapidly than ex-

RELATION OF EXPENDITURE FOR FREIGHT, CARTAGE, ETC. TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

TABLE 34

	Classified	Stores	Reporting on Ex	penditure for	Preight,	Ratio Which Amount of Expendi- ture for Freight, Cartage, etc. per \$100 of Total Net Bales for	
Years '	Total Net Sales (in 000's)	Number . of Store- years	Total Net Sales	Expenditure for Freight, Cartage, etc.	Amount per \$100 of Total Net Sales	Stores of Different Size for Each Year, is of the Average for All Years Per Cent. 0 20 40 50 80 100 120 140 16	Per Cent.
	Total (Average)	626	\$55,464,298	\$422,578	\$0.76		100.0
Total	Under \$40	194	5,328,236	47,663	0.89		117.
(Average)	\$40 to \$80	228	13,118,069	105,040	0.80	-	105.
	\$80 to \$180	153	17,851,973	142,080	0.80	-	105.
	\$180 & over	51	19,166,020	127,795	0.67		88.1
Total (Average) Under \$40 \$40 to \$80		265	29,470,045	217,996	0.74		97.
	Under \$40	47	1,414,073	10,122	0.72		94.
	\$40 to \$80	102	5,889,066	48,790	0,83		109.
	\$80 to \$180	84	9,934,382	76,104	0,77		101.
	\$180 & over	32	12,232,524	82,980	0.68		89.
	Total (Average)	229	18,592,510	144,168	D.78		102.
1918	Under \$40	78	2,124,235	19,599	0.92		121.
1910	\$40 to \$80	85	4,957,707	38,176	0.77		101.
	\$80 to.\$180	50	5,711,126	47,755	0.84		110.
	\$180 & over	16	5,799,442	38,638	0.67		88.
	Total (Average)	132	7,401,743	60,414	0.82		107.
1914	Under \$40	69	1,789,928	17,942	1.00		131.
7973	\$40 to \$80	41	2,271,296	18,074	0.80		105.
	\$80 to \$180	19	2,206,465	18,221	0.83		109.
	\$180 & over	3	1,134,054	6,177	0.54		72.

penses for the purpose named, and that with the increase in the size of stores these expenses become proportionately less.

Table 34 shows that the relationship of the amount of expense for freight and cartage to \$100 of total net sales is \$0.76. Between 1914 and 1919 the ratio decreased from \$0.82 to \$0.74, or by 9.8 per cent. When the three years' experience is com-

bined, the ratios decrease as the stores increase in size, but for the individual years the direction of change is erratic from store-group to store-group. Between the smallest and largest stores, there is always a decrease, although this is not true for stores of moderate size.

Table 35 shows that the relationship of the amount of expense for interest on borrowed money to \$100

TABLE 35

RELATION OF AMOUNT OF INTEREST ON BORROWED MONEY TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	Classified	Stores Re	porting on Int	erest on Borro	wed Money	Ratio Which Amount of Interest on Borrowed Money per \$100 of Total Net Sales for Stores of	
Years	Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total Amount of Interest	Amount per \$100 of Total Net Sales	Different Size for Each Year, is of the Average for all Years	Cent
	Total (Average)	510	\$48,998,497	\$313,622	\$0.64		200.
Total	Under \$40	156	4,302,119	48,167	1.12		175.
Average)	\$40 to \$80	181	10,577,462	89,679	0.85		132.
	\$80 to \$180	110	14,110,729	91,527	0.65		101.
\$180 & over	54	20,008,187	84,249	0.42		65.	
Total (Average) Under \$40 \$40 to \$80	209	25,553,054	126,470	0.49		76.	
	Under \$40	36	1,070,985	10,884	1.02		159.
	\$40 to \$80	80	4,715,144	35,377	0.75		117.
	\$80 to \$180	61	7,394,500	41,889	0.57		89.
	\$180 & over	32	12,372,425	38,320	0.31	-	48.
	Total (Average)	192	17,036,954	133,666	0.78		121.
1918	Under \$40	63	1,737,115	22,516	1.30		203.
TATO	\$40 to \$80	69	4,034,079	37,969	0.94		146.
	\$80 to \$180	41	4,764,052	33,539	0.70		109.
	\$180 & over	19	6,501,708	39,642	0.61		95.
	Total (Average)	109	6,408,489	53,486	0.83		129.
1914	Under \$40	57	1,494,019	14,767	0.99		154.
1078	\$40 to \$80	32	1,828,239	16,333	0.89		139.
	\$80 to \$180	27	1,952,177	16,099	0.82		128.
	\$180 & over	3	1,134,054	6,287	0.55		85.

Average \$0.64

of total net sales is \$0.64. Between 1914 and 1918, the ratio decreased from \$0.83 to \$0.78, or by a difference of 6.0 per cent. Between 1918 and 1919, it decreased from \$0.78 to \$0.49, or by a difference of 37.2 per cent. While the tendency for the ratios to decrease is true for all of the stores when averaged, it is not true for each store-group, as between 1914 and 1918. For each of the years, and

for the three years combined, the ratios decrease as the size of the stores increases. This tendency, while essentially consistent for each of the years, is noticeably so for 1919. The explanation for this fact is probably found in better credit connections which the large stores possess, and in their more rapid turnover of stock.*

*Stock turnover will be treated in Volume V.

TABLE 36

RELATION OF EXPENDITURE FOR BAD DEBTS TO TOTAL NET SALES FOR STORES

CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	Classified	Stores	Reporting on I	Bad Debts Wri	tten off	Ratio Which Amount of Bad Bebts Written off per \$100	
Years	Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total Amount of Bad Debts Written off	Amount per \$100 of Total Net Sales	of Total Net Sales for Stores of Different Size for Each Year, is of the Amount for All Years Per Cent. 0 20 40 60 60 100 120 1	Per Cent.
	Total (Average)	434	\$43,318,577	\$276,631	\$0.64		100.0
Total	Under \$40	117	3,154,530	23,706	0.75		117.2
(Average)	\$40 to \$80	161	9,446,572	64,035	0.68	1	106.3
	\$80 to \$180	106	12,492,297	80,175	0.64	-	100.0
	\$180 & over	50	18,285,178	108,717	0.60		93.8
	Total (Average)	193	25,895,210	138,412	0.58		90.6
	Under \$40	30	877,523	5,078	0.58		90.6
1919	\$40 to \$80	69	4,058,792	23,026	0.57		89.1
	\$80 to \$180	64	7,593,939	42,638	0.56		87.5
	\$180 & over	30	11,364,956	67,670	0.60		93.9
	Total (Average)	159	14,524,896	108,478	0.75		117.2
1918	Under \$40	46	1,251,871	9,757	0.78		121.9
1918	\$40 to \$80	64	3,762,245	28,923	0.77		120.3
	\$90 to \$180	32	3,784,612	31,778	0.84		131.3
	\$180 & over	17	5,726,168	38,020	0.66		103.1
	Total (Average)	82	4,908,471	29,741	0,81		95.3
3034	Under \$40	41	1,025,136	8,871	0.87		135.9
1914	\$40 to \$80	28	1,625,535	12,086	0.74		115.6
	\$80 to \$180	10	1,123,746	5,757	0.51		79.7
	\$180 & over	3	1,134,054	3,027	0.27		42.2

Table 36 shows that the relationship of the amount of bad debts written off to \$100 of total net sales is \$0.64. This ratio is based upon 434 store-years, \$43,000,000 of total net sales, and \$277,000 of bad debts written off. Between 1914 and 1918, the ratio increased from \$0.61 to \$0.75, or by a difference of 23.0 per cent. Between 1918 and 1919, the ratio

decreased from \$0.75 to \$0.58, or by a difference of 22.7 per cent. These changes, while true for the stores of all sizes, are not true for those of different size between 1914 and 1918. An inspection of the table will reveal the exceptions to the general rule. For each of the years, and for the three years combined, with minor exceptions, the ratios decrease as the

TABLE 37

RELATION OF EXPENDITURE FOR INSURANCE TO TOTAL NET SALES FOR STORES

CLASSIFIED BY SIZE, 1919, 1918, AND 1914

		5	itores Reportin	g on Insurance	:8	Ratio Which Amount of In- surance per \$100 of Total Net Eales for Stores of	
Years	Classified Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Fotal Amount of Insurance	Amount per \$100 of Total Net Sales	Different Size for Each Year, is of the Average for All Years Per Cent. 0 30 60 90 120 150 180	Per
	Total (Average)	668	\$60,286,477	\$280,918	\$0:47		100.
Total	Under \$40	203	5,682,602	34,028	0.60		127.
Average)	\$40 to \$80	239	13,850,061	70,647	0.51		108.
	\$80 to \$180	164	19,042,383	98,331	0.52		110.
	\$180 & over	62	21,711,431	77,912	0.36		76.
1919	Total (Average)	285	32,306,000	139,507	0.43		91.
	Under \$40	47	1,434,221	8,009	0.56		119.
	\$40 to \$80	107	6,184,966	28,404	0.46		97.
	\$80 to \$180	92	10,886,819	50,441	0.46		97.
	\$180 & over	39	13,799,994	52,653	`.38		80.
	Total (Average)	240	20,164,854	100,244	0.50		106.
1918	Under \$40	79	2,211,868	14,198	0.64		136.
1919	\$40 to \$80	88	5,155,162	28,891	0.56		119.
	\$80 to \$180	53	6,020,441	33,594	0.56		119.
	\$180 & over	20	6,777,383	23,561	0.35		74.
	Total (Average)	143	7,815,623	41,167	0.53		112.
1914	Under \$40	77	2,036,513	11,821	0,58		123.
2024	\$40 to \$80	44	2,509,933	.13,362	0.53		112.
	\$80 to \$180	19	2,135,123	14,296	0.67		142.
	\$180 & over	3	1,134,054	1,698	0.15		31.

stores increase in size. The graphic portion of the table shows both the relative amounts for different stores and the consistency of the changes from group to group.

Table 37 shows that the relationship of the amount of expenditures for insurance — burglary, tornado, plate glass, hold-up, workmen's compensation, casualty, etc.—

per \$100 of total net sales is \$0.47. This ratio is based upon 668 storeyears, \$60,000,000 of total net sales, and \$281,000 of such insurance payments. Between 1914 and 1919, the ratio decreased from \$0.53 to \$0.43, or by a difference of 18.9 per cent. For each of the years separately, as well as for the three years combined, with minor exceptions, the ratios de-

TABLE 38

RELATION OF EXPENDITURE FOR STATE AND LOCAL TAXES TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	***********		Stores Report	ting on Taxes		Ratio Which Amount of Taxes per \$100 of Total Net Sales for Stores of Different	
Tears	Classified Total Net Sales (in 000's)	Rumber of Store- years	Total Net Sales	Amount of State and Local Taxes	Amount per \$100 of Total Net Sales	Size for Each Year, is of the Average for All Years Per Cent. Q 20 40 50 80 100 120 140	Per Cent.
	Total (Average)	672	\$57,792,995	\$585,942	\$0.58		100.0
Total	Under \$40	206.	5,692,978	35,786	0.63	-	100.0
(Average)	\$40 to \$80	258	14,902,791	90,102	0.60		103.4
	\$80 to \$180	154	17,880,993	114,153	0.64		110.5
	\$180 & over	54	19,516,233	95,901	0.50		86.2
Total (Average) Under \$40 \$40 to \$80		288	30,994,843	175,885	0.57		98.3
	Under \$40	49	1,514,275	8,927	0.59		101.
	\$40 to \$80	113	6,519,017	39,705	0.61		105.2
	\$80 to \$180	93	11,021,022	68,210	0.62		106.
	\$180 & over	33	11,940,529	59,043	0.49		84.
	Total (Average)	245	19,525,376	116,652	0.60		103.
2010	Under \$40	82	2,266,326	14,761	0,65		112.
1918	\$40 to \$80	97	5,678,130	35,527	0.63		108.
	\$80 to \$180	48	5,342,270	35,319	0.66		115.
	\$180 & over	18	6,241,650	31,045	0.50	-	86.
	Total (Average)	139	7,272,776	43,405	0.60		103.
1914	Under \$40	75	1,912,377	12,098	0.63		108.
4049	\$40 to \$80	48	2,708,644	14,870	0.55		94.
	\$80 to \$180	13	1,517,701	10,624	0.70		120.
	\$180 & over	3	1,134,054	5,813	0.51		87,

crease with an increase in the size of the stores. The nature of this decrease and the store-groups which do not follow the general tendency may be seen by an inspection of the graphic and other parts of the table.

Table 38 shows that the average amount of state and local taxes paid per \$100 of total net sales, based upon

TABLE 39

RELATION OF EXPENSE FOR COMMUNICATION (TELEGRAMS, TELEPHONE, INCLUDING TOLLS, MESSENGER SERVICE) TO TOTAL NET SALES, 1919, 1918, AND 1914

	St	ores Reporting	Expense for C	communicat:	ion
Years	Number	Total	Amount-	Amoun	t per \$100 of Total Net Sales
	Store- years	Net Sales	of Expense	Actual	Graphic Cents 0 3 6 9 12 1
Total (Average)	410	\$35,718,109	\$42,813	\$0.12	
1919	181	18,724,699	22,276	0.12	
1918	147	13,184,022	15,565	0.12	
1914	82	3,809,388	4,972	0.13	

TABLE 40

RELATION OF TRAVELING EXPENSE TO TOTAL NET SALES, 1919, 1918, AND 1914

		Stores Re	eporting Trav	eling Expe	ense
Years	Number	Total	Amount	Amount	per \$100 of Total Net Sales
	of Store- years	Net Sales	of Expense	Actual	Graphic Cents Q 10 20 30 40 50
Total (Average)	277	\$27,829,695	\$96,807	\$0.35	
1919	139	15,373,871	63,309	0.41	
1918	96	10,298,403	25,747	0.25	
1914	42	2,157,421	7,751	0.36	

TABLE 41

RELATION OF EXPENSE FOR OFFICE SUPPLIES TO TOTAL NET SALES, 1919, 1918, AND 1914

	Sto	ores Reporting	Expense for Oi	fice Supp	lies
Tears	Number				per \$100 of Total Net Sales
	Store- years	Total Not Sales	Amount of Expense	Actual	Graphic Cents 9 5 10 15 20 25 30
Total (Average)	331	\$33,274,879	\$80,024	\$0.24	
1919	149	17,876,579	41,798	0.23	
1918	119	12,272,672	29,227	0.24	
1914	63	3,125,628	8,999	0.29	

672 store-years for 1914, 1918, and 1919, combined, is \$0.58. For 1914 and 1918, this amount remained constant at \$0.60, while between 1918 and 1919, it decreased to \$0.57. For each of the years separately, and for the three combined, there appears to be no tendency for the ratios to in-

crease or to decrease with the size of stores, and this is what would reasonably be expected. State and local taxes undoubtedly vary with the types of business premises, but they bear no relation to sales otherwise than through inventories and average stock, and this connection would not

TABLE 42

RELATION OF DEPRECIATION ON MERCHANDISE TO TOTAL NET SALES, 1919, 1918, AND 1914

		Stores Rep	porting Deprecia	ation on Me	rchandise .
Years	Number	Total	Amount of	Amount	per \$100 of Total Net Sales
	Store- years	Net Sales	Depreciation	Actual \$0	Graphic \$1 \$2 \$3
Total (Average)	81	\$7,516,274	\$99,307	\$1.32	
1919	32	3,912,590	38,948	1.00	
1918	29	2,690,615	40,476	1.50	
1914	20	913,269	19,883	2.18	

TABLE 43

RELATION OF DEPRECIATION ON FIXTURES TO TOTAL NET SALES, 1919, 1918, AND 1914

		Store	s Reporting Depr	eciation o	on Fixtures
Years	Number			Amount	per \$100 of Total Net Sales
1	of. Store- years	Total Net Sales	Amount of Depreciation	Actual	Graphic Cents Q 10 20 30 40 50 60 70
Total (Average)	387	\$41,765,259	\$214,509	\$0.51	
1919	175	23,347,252	108,697	0.47	
1918	138	13,697,380	75,163	0.55	
1914	. 74	4,720,627	30,649	0.65	

necessarily be evident in the variety of types and locations of stores here under review.

In Tables 39 to 47, inclusive, the ratios of certain items of general expense to total net sales are given for the years 1919, 1918, and 1914, separately and combined. Only those

specific purposes are included for which sufficient data were available as a basis for computing a satisfactory average. Of course, small and large stores are combined in the amounts for each year, but since there is no particular reason why the proportion between them should be

TABLE 44

RELATION OF EXPENSE FOR WRAPPINGS AND CONTAINERS TO TOTAL
NET SALES, 1919, 1918, AND 1914

	Sto	ores Reporting E	Expense for W	rappings a	nd Containers
Years	Number	mata3			oer \$100 of Total
	of Store- years	Net Sales	Amount of Expense	Actual	Oraphic Cents 0 5 10 15 20 25
Total (Average)	260	\$24,110,195	\$53,420	\$0.22	
1919	109	12,927,932	27,923	0.22	
1918	96	8,079,115	18,459.	0.23	
1914	55	3,103,148	7,038	0.23	

radically different from year to year, a yearly average appears to have some merit. To have classified the stores by size and by the population of the cities in which they are located would have so reduced the number in each

class as to have made comparisons meaningless.

The ratios for each expenditure in terms of net sales are truly averages—averages of unlike stores with unlike locations—yet they are strangely

TABLE 45

RELATION OF MEMBERSHIP DUES IN LOCAL COMMERCIAL ASSOCIATION, NATIONAL ASSOCIATION, CLUBS, LODGES, ETC. TO NET SALES, 1919, 1918, AND 1914

	Stores Reporting Expense for Dues				ues
Years	Number	Maha 2	Amount		per \$100 of Total let Sales
	of Store- years	Total Net Sales	of Expense	Actual	Graphic Cents 2 4 6 8 10
Total (Average)	339	\$28,310,885	\$23,521	\$0.08	
1919	153	15,391,215	12,960	0.08	
1918	123	9,335,567	7,527	0.08	
1914	63 3,584,103		3,034	0.08	

TABLE 46

RELATION OF AMOUNT OF SUBSCRIPTIONS (LOCAL CREDIT BUREAUS AND TRADE PAPERS) TO TOTAL NET SALES, 1919, 1918, AND 1914

	Stores Reporting Amount of Subscriptions											
Tears	Number			Amount per \$100 of Total Net Sales								
	of Total Store- Net Sales years		Amount of Subscriptions	Actual Graphic Cents								
Total (Average)	385	\$28,839,186	\$13,085	\$0.05								
1919	170	15,669,380	6,683	0.04								
1918	133	9,114,551	4,798	0.05								
1914	82	4,055,255	1,604	0.04								

alike for each purpose from year to year, some showing a surprising constancy, and others a tendency to increase or decrease. They are supplied for what they may be worth to the merchant as a guide in expense distribution and to take the place of the "guesses" which in the past have been the only standard to which recourse could be had.

TABLE 47

RELATION OF AMOUNT OF CONTRIBUTIONS TO CHARITY, COMMUNITY FESTIVALS, "DRESS UP" OCCASIONS AND FAIRS TO TOTAL NET SALES, 1919, 1918, AND 1914

		Stores Repo	orting Amount of	Contribu	tions
Years	Number	Total	Amount of		per \$100 of Total Net Sales
	of Store- years	Net Sales	Contributions	Actual	Graphic Cents 0 5 10 15 20 25
Total (Average)	397	\$34,716,021	\$67,876	\$0.20	
1919	174	18,639,621	30,609	0.16	
1918	146	11,639,830	28,465	0.24	
1914	77	4,436,570	8,802	0.20	

A.—Summary.

- (1) The tendency for amounts of individual general expense items in terms of net sales was to decrease between the years 1914 and 1919. The rate, however, is far from uniform in all cases, and in some the direction of change is erratic.
- (2) Generally speaking the amounts of individual general expense items in terms of net sales decrease as the size of the store increases, the single exception, in the cases treated, being state and local taxes.

IV. YEARLY AMOUNTS OF BUSHELLING EXPENSE IN CLOTHING STORES, 1919, 1918, AND 1914

BUSHELLING expense, as used herein, includes tailors' wages and commissions and cost of materials and supplies. It does not include light, heat and power, nor the rent paid for bushelling quarters. Stores doing primarily custom work are omitted from consideration, and only those are used which operate a department or section of their business solely or primarily for alteration purposes, or have the same done by outside parties, and for which they were able to supply the amounts paid.

The facts on bushelling expense are not as accurate as they might be, but in spite of certain limitations they may be used, when combined for similar types and sizes of stores, to indicate roughly, if not with absolute accuracy, the ratios which bushelling expense bears to net sales of clothing. Every effort has been made to correct possible errors and to make the data essentially comparable.

1.—YEARLY AMOUNTS OF BUSHELLING EXPENSE PER \$100 OF TOTAL NET SALES OF CLOTHING, 1919, 1918, AND 1914.

On the basis of the experience of 225 store-years, \$15,000,000 of clothing sales and \$398,000 of bushelling expense, the amount of expense for bushelling is found to average \$2.66 per \$100 of total net sales of clothing for the three years 1919, 1918, and 1914, combined. In 1919, this amount was \$2.57; in 1918, it was \$2.77; and in 1914, \$2.76. That is, between 1914 and 1918 the average increased \$0.01, while between 1918 and 1919, it decreased \$0.20. The increase for the four-year period is so small that it may be ignored—the averages may be said to be identical. On the other hand, the decrease between 1918 and 1919 is appreciable, and seems to be in line with the distinct tendency of the period, viz., to reduce both the amount and cost of alterations.

TABLE 48
RELATION OF BUSHELLING EXPENSE TO CLOTHING SALES, 1919, 1918, AND 1914

	Stor	es Reporting Bu	shelling Expe	ense	Ratio Which Amount of Bushelling Expense per \$100 of Sales of Cloth-	
Years	Number of Store- years	Sales of Clothing	Total Bushelling Expense	Bushelling Expense	ing in All Stores for Each Year, is of the Amount for All Years Per Cent.	Per Cent.
Total (Average)	225	\$14,961,678	\$398,447	\$2.66		100.0
1919	97	7,977,627	205,368	2.57		96.6
1918	82	4,825,780	133,549	2.77		104.1
1914	46	2,158,271	59,530	2.76		103.8

Table 48 contains the basic data upon which the generalizations above are based. The number of stores is smaller than that used in other parts of this study, but probably adequate to indicate with approximate accuracy the ratios from year to year. With a broader sampling, the exact amounts might be somewhat, but it is doubtful if they would be appreciably, different.

It should be kept in mind that both sales of clothing and bushelling expense per store increased during the period studied. The amount of change is indicated for both factors in Table 49. An average increase in sales of clothing per store of 25.4 per cent. between 1914 and 1918 is met by an average increase in bushelling expense per store, for the same period, of 25.9 per cent. This means that bushelling expense in terms of sales of clothing increased 0.4 per cent. Between 1914 and 1919, sales of clothing per store increased 75,3 per cent., while bushelling expense per store increased 63.6 per cent. Relatively,

therefore, bushelling expense in terms of sales decreased 6.9 per cent. Or, stated in another way, by comparing 1918 and 1919, sales per store increased 39.7 per cent., bushelling expense increased 30.0 per cent., while the latter in terms of the former decreased 7.2 per cent.

The amounts in the various years, and the per cents of increase or decrease based on 1914, are shown in Table 49.

In both Tables 48 and 49, the number of stores considered varies from year to year. In Tables 50 and 51, identical stores are compared for the different years. When the sales and bushelling expense for the same 45 stores are compared, the results closely agree with those shown for different stores. The average of \$2.66 for the varying number becomes \$2.63 for the identical group. That is, the differences are negligible for the three vears combined, as also are those for the years treated separately. For the identical group, the average decreased in both 1918 and 1919 as

TABLE 49

AVERAGE AMOUNT OF SALES OF CLOTHING AND OF BUSHELLING EXPENSE PER STORE FOR 1919, 1918, AND 1914, AND PER CENT. OF CHANGE FROM 1914

		Average Amount of Sales of Clothing per Store			Average Amount of Bushelling Expense per Store			Average Amount of Bushelling Expense per \$100 of Sales of Clothing			
Years		Per Cent. Increase over 1914			Per Cent. Increase over 1914			Per Cent. Increase or Decrease from 1914			
	Amount	Amount	Graphic Per Cent.	Amount	Amount	Graphic Per Cent. 0 20 40 60 8	Amount	Amount	Graphic Per Cent. 0 20 40 60 80		
1919	\$82,244	75.3		\$2,117	63,6		\$2.57	-6.9	P		
1918	58,851	25.4	_	1,629	25.9	-	2.77	+0,4			
1914	46,919			1,294			2.76				

compared with 1914, the amount for the single year—1918 to 1919—being more than twice as large as for the four-year period between 1914 and 1918.

For identical stores, net sales of clothing and bushelling expense per store increased in both of the years as compared with 1914, but bushelling in terms of sales decreased, the amount being somewhat larger for the same, than it was for a varying, group of stores. The fact that both

groups of stores indicate the same general tendency in the change from year to year, in the amount of bushelling expense in terms of clothing sales, lends support to the belief that the changes here noted are not simply due to chance or to the particular samples studied.

Tables 50 and 51 contain comparative data on sales of clothing and bushelling expense for identical stores.

TABLE 50

RELATION OF BUSHELLING EXPENSE TO SALES OF CLOTHING IN 45 IDENTICAL STORES, 1919, 1918, AND 1914

	Stor	res Reporting Bu	shelling Expe	nse	Ratio Which Amount of Bushelling Expense per \$100 of Sales of Cloth-	
St	Number of Store- years	Sales of Clothing	Total Bushelling Expense	Bushelling Expense per \$100 of Sales of Clothing	ing in 45 Identical Stores for Each Year, is of the Amount for All Years	Per Cent.
Total (Average)	135	\$10,230,644	\$269,057	\$2.63		100.0
1919	45	4,877,613	121,568	2.49		94.7
1918	45	3,278,135	89,209	2,72		103.4
1914	45	2,074,896	58,280	2.81		106.8

TABLE 51

AVERAGE AMOUNT OF SALES OF CLOTHING AND OF BUSHELLING EXPENSE PER STORE FOR 45 IDENTICAL STORES, 1919, 1918, AND 1914, AND PER CENT.

OF CHANGE FROM 1914

		Average Amount of Sales of Clothing per Store			Amount of	Bushelling Store	Average Amount of Bushelling Expense per \$100 of Sales of Clothing			
Years		Per Cent. Increase over 1914			Per Cent. Increase			Per Cent. Decréase from 1914		
	fruunk	Amount	Graphic Per Cent. 0 40 80 120 160	Amount	Amount Per Cent. 0 40 80 120 160		Amount	Amount	Graphic Per Cent. 9 40 80 120 160	
1919	\$108,391	135.1		\$2,702	108.6		\$2.49	-11i4	Þ	
1919	72,847	58.0	-	1,982	53.1		2.72	-3.2		
1914	45,109			1,295			2.81			

A.—Yearly Amounts of Bushelling Expense per \$100 of Total Net Sales of Clothing for Stores Classified by Size, 1919, 1918, and 1914.

The average amount of bushelling expense per \$100 of total net sales of clothing, for the three years 1919, 1918, and 1914, combined, is \$2.66. For the stores with sales less than \$40,000 per year, in any one of the

three years, it is \$4.21. The smallest amount is \$2.56—for stores with sales between \$40,000 and \$80,000 per year—and this amount is closely approximated for the stores with larger yearly sales. This is the condition when the three years are averaged. The averages for stores of different size for 1919 and 1918 follow those for the combined years. Those for 1914, however, are somewhat differ-

TABLE 52

RELATION OF BUSHELLING EXPENSE TO SALES OF CLOTHING IN STORES
CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	Classified	St	ores Reporting	Bushelling Ex	pense	Ratio Which Amount of Bushell- ing Expense per \$100 of Sales	
Years	Total Net Sales (in 000's)	Number of Store- years	Seles of Clothing	Total Bushelling Expense	Bushelling Expense per \$100 of Sales of Clothing	of Clothing for Stores of Different Size for Each Year, is of the Amount for All Years Per Cent. 0 30 60 90 120 150 180 210 2	Per Cent.
	Total (Average)	225	\$14,961,678	\$398,447	\$2.66		100.0
Total	Under \$40	37	489,012	20,591	4.21		158.3
(Average)	\$40 to \$80	69	1,929,067	49,464	2.56		96.2
	\$80 to \$180	87	5,462,540	144,074	2.64		99.2
	\$180 & over	32	7,081,059	184,318	2.60		97.7
	Total (Average)	97	7,977,627	205,368	2.57		96.6
	Under \$40	6	98,378	5,718	5.81		218.4
1919	\$40 to \$80	29	740,115	14,935	2.02		75.9
	\$80 to \$180	42	2,820,895	75,285	2.67		100.4
	\$180 & over	20	4,318,239	109,430	2.53		95.1
	Total (Average)	82	4,825,780	133,549	2.77		104.1
	Under \$40	16	181,918	8,813	4.84		182.0
1019	\$40 to \$80	24	666,674	18,127	2.72		102.3
	\$80 to \$180	33	1,931,432	50,176	2.60		97.7
	\$180 & over	9	2,045,756	56,433	2.76		103.8
	Total (Average)	46	2,158,271	59,530	2.76		103.8
	Under \$40	15	208,716	6,060	2.90	-	109.0
1916	\$40 to \$80	16	522,278	16,402	3.14		118.0
	\$80 to \$380	12	710,213	18,613	2.62		98.5
	\$180 & over	3	717,064	18,455	2.57		96.6

ent. While the small number of stores reporting for this year may help to explain this condition it undoubtedly is due also to the absence of any common policy among stores of different size as to the amount and character of alterations made, and the failure to segregate accurately expenses for this purpose. In the smaller stores, the wages of bushelmen, as reported, probably include a

part of the compensation paid to the same person as salesman. Moreover, the amount of necessary alterations is undoubtedly larger in small than in large stores, because of the small stock of clothing carried.

The data available for the individual years are too meagre to serve as an adequate basis for measuring the relationship of bushelling expense to sales of clothing for stores of dif-

TABLE 53

RELATION OF BUSHELLING EXPENSE TO SALES OF CLOTHING FOR 45 IDENTICAL STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

	Classified	Sto	res Reporting B	ushelling Exp	enso	Ratio Which Amount of Bushelling Expense per \$100 of Bales of Clothing for 45 Identical Stores	
Years	Total Net Sales (in 000's)	Number of Store- years	Sales of Clothing	Total Bushelling Expense	Bushelling Expense per \$100 of Sales of Clothing	of Different Size for Each Year, is of the Amount for All Years	Per Cent.
	Total (Average)	135	\$10,230,644	\$269,057	\$2.63		100.0
Total	Under \$40	22	305,069	9,185	3.01		114.4
Average)	\$40 to \$80	43	1,307,759	35,957	2.75	-	104.
	\$80 to \$180	49	3,170,878	80,741	2.55		97.0
	\$180 & over	21	5,446,938	143,174	2.63		100.0
	Total (Average)	65	4,877,613	121,568	2.49		94.
	Under \$40	1	14,000	220	1.57		59.
1919	\$40 to \$80	12	333,510	7,900	2.37		90.
	\$80 to \$180	20	1,436,968	34,645	2.41		91.
	\$180 & over	12	3,093,135	78,803	2.55		97.
	Total (Average)	45	3,278,135	89,209	2.72		103.4
1918	Under \$40	6	82,353	2,905	3.53		134.
TATR	\$40 to \$80	15	451,971	11,655	2.58		98.
	\$80 to \$180	18	1,107,072	28,733	2.60		98.
	\$180 & over	6	1,636,739	45,916	2.81		106.
	Total (Average)	45	2,074,896	58,280	2.81		106.
****	Under \$40	15	208,716	6,060	2.90		110.
2914	\$40 to \$80	16	522,278	16,402	3.14		119.
	\$80 to \$180	33	626,858	17,363	2.77		105.
	\$180 & over	3	717,064	18,455	2.57		97.

Average \$2.63

ferent size. They are published because of the value they may have as a general guide and because, faulty and meagre as they are, they are undoubtedly superior to any others available. They suggest, if they do not measure accurately, the bounds within which merchants may roughly gauge their own expense ratios for this purpose.

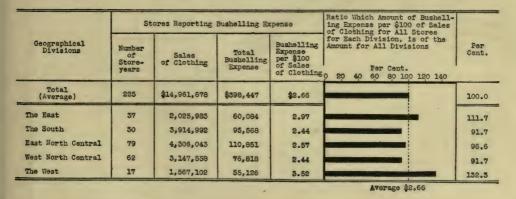
Although the data in Table 53 apply to fewer stores than those contained in Table 52, they have an advantage for comparative purposes because the same stores reported for each of the three years. From year to year, of course, the stores are not found in the same groups. Their positions change according to their sales. From year to year, however, they are identical. In 1919, the aver-

age for stores of all sizes was \$2.49; in 1918, it was \$2.72; and in 1914, \$2.81. Between 1914 and 1918 there was a decrease of \$0.09 in the bushelling expense per \$100 of clothing sales, while between 1918 and 1919 there was a decrease of \$0.23. When the stores are considered by size, the averages show conflicting tendencies.

In 1919, the amounts increase with the size of the stores; in 1918, the direction of change is erratic; and in 1914, the amounts decrease as the stores become larger. This absence of a definite trend in separate years is carried into the total for the three years, giving results which are inconclusive as to the relationship between bushelling expense and clothing sales in stores of different size.

TABLE 54

RELATION OF BUSHELLING EXPENSE TO SALES OF CLOTHING IN STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914, COMBINED



B.—Yearly Amounts of Bushelling Expense per \$100 of Total Net Sales of Clothing, for Stores Classified by Geographical Divisions, 1919, 1918, and 1914.

In Table 54, stores reporting both their sales of clothing and their expense for bushelling are classified by geographical divisions of the United States.*

In spite of the small number of stores reporting, their varying size, and their wide geographical distribution, the amounts of bushelling expense per \$100 of total net sales of clothing do not differ widely for the various parts of the country. The average for all divisions is not different by more than \$0.86 or 24.4 per cent. from that for the section having the largest amount; and the averages for three of the divisions are within \$0.10 or 3.8 per cent of the average for the country as a wnole.

From Table 55 the amounts for each of the three years for the various geographical divisions may be directly compared. The graphic part of the table throws these into relief, and indicates in addition the fact that the amounts are larger, not only for the three years combined, but also for each of the years separately, in the West and in the East than they are in the other regions.

In spite of these minor differences, however, the uniformity at once challenges attention and suggests that the

* The limits of the geographical divisions of the United States are described in Volume I, p. 18.

data are better than rough approximations. Even if they are not absolutely accurate—and what is "accuracy" in such a case as this with stores varying as to policy, size, and location?—they at least are based upon records, submitted in good faith, and analyzed with no other object in mind than stating the facts.

C.—Business Policies in Respect to Clothing Alterations.

Four hundred and thirty-five stores answered the questions of the questionnaire relating to their business policies in respect to alterations on clothing. Of this number, 374 or 86 per cent, reported that they make no charge for alterations. Sixty-one or 14 per cent. reported that they charge the customer for alterations, under certain circumstances. In the main, those who charge customers for alterations do so only in case of extensive alterations or remodeling. Some charge customers for alterations of cheaper summer goods and clothing bought at less than the regular price. and at sales.

Two hundred and forty or 63.6 per cent. reported that they have no definite policy regarding the kind of alterations allowed. The policies of the remainder vary widely, but in general they may be summarized by saying that it is the aim of the merchant to satisfy the customer, and to that end to make free of charge necessary alterations, such as shortening or lengthening the sleeves and trou-

TABLE 55

RELATION OF BUSHELLING EXPENSE TO SALES OF CLOTHING IN STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914

	Classified	Stor	es Reporting Bu	shelling Expe	eanse	Ratio Which Amount of Bushell- ing Expense per \$100 of Sales of Clothing for All Divisions	
Geographical Divisions	Total Het Sales (in 000's)	Number of Store- year's	Sales of Clothing	Total Bushelling Expense	Bushelling Expense per \$100 of Sales of Clothing	and for Each Division is for Each Year, Based on the Aver-	Per Cent
	Total (Average)	225	\$14,961,678	\$398,447	\$2.66		100.
Total (Average)	1919	97	7,977,627	205, 368	2.57		96.
	1918	82	4,825,780	133,549	2.77		104.
	1914	46	2,158,271	59,530	2.76		105.
	Total (Average)	37	2,025,983	60,084	2.97		111.
The East	1919	16	1,032,643	29,621	2.87		107.
	1918	12	604,323	18,941	3.13		117.
	1914	9	389,017	11,522	2.96	-	111.
	Total (Average)	50	3,914,992	95,568	2.44		91.
The South	1919	23	1,095,114	45,487	2.40		90.
	1918	12	1,410,036	35,268	2.50		94.
	1914	5	609,842	14,813	2.43		91.
	Total (Average)	79	4,306,043	110,851	2.57		96.
Bast North Central	1919	52	2,369,350	57,904	2.44		91.
Central	1918	29	1,345,036	36,631	2.72	-	102.
	1914	18	591,657	16,316	2.76		103.
	Total (Average)	62	3,147,558	76,818	.2.44		91.
West North Central	1919	29	1,849,817	42,405	2.29		86.
Contrat	1918	22	955,163	25,117	2.63		98.
	1914	11	342,578	9,296	2.71		101.
	Total (Average)	17	1,567,102	55,126	3.52		132.
The Rest	1919	7	830,703	29,951	3.61		135.
	1918	7	511,222	17,592	3.44		129.
	1914	3	225,177	7,583	3.37		126.

Average \$2.06

sers, adjusting the waist band, raising the shoulders of the coat, etc.

D.—Summary.

- (1) The amount of bushelling expense per \$100 of total net sales of clothing was \$2.66 for the three years 1919, 1918, and 1914, combined. In 1919, the amount was \$2.57; in 1918, \$2.77; and in 1914, \$2.76. That is, between 1914 and 1918 the amount remained constant, while between 1918 and 1919 it decreased by 7.4 per cent.
- (2) On the basis of the data available, no generalization is possible relative to the variation

- of bushelling expense per \$100 of total net sales of clothing in stores of different size.
- (3) The average amounts spent for bushelling per \$100 of total net sales of clothing are essentially uniform for stores in the different geographical divisions of the country, although in the East and the West the amounts seem to be slightly larger than those in other sections.
- (4) The typical business policy in respect to clothing alterations is to satisfy the customer and to make, without charge to him, the alterations which are necessary to secure a "fit."

LOTHING merchants asked to report for the years 1919. 1918. and 1914. separately, the amounts of their "total expenses." The purpose of asking for these amounts was primarily to secure checks on the detailed expense items for which the questionnaire provided. For this purpose they proved to be serviceable. Moreover, the insertion of this question gave merchants, who were not in a position to furnish all of the details requested, an opportunity to make a report of their aggregate expenses. This was felt to be necessary, since facts were wanted from as complete a sampling of the membership of the National Association of Retail Clothiers as it was possible to interest in this study. Not all members were in a position to report their expenses in detail, and some who possessed the necessary information, undoubtedly would not do so because of the cost of preparing the data. A total, they might give; the details, they would not supply.

"Total expense," as used herein, refers to the total reported under this caption, or as secured by aggregating the details. In some instances these amounts were inconsistent and could not be made to agree. In such cases, the reports were either not used, or corrected through correspondence. In every case, the returns were subjected to a careful statistical and accounting audit, and only those used which appeared to be bona fide.

Total expense is an aggregate of the individual expense items-rent, and salaries, advertising, bushelling, and general expense. It does not include interest on permanent investment, but does include interest on borrowed money used in merchandising. current Moreover. while state and local taxes are included, federal taxes are excluded. Special study is made of rent, and wages and salaries in Volume II: general expense, bushelling and total expense are discussed in this volume. while advertising is fully treated in Volume IV. Together, these three volumes systematically cover the subject of expense ratios as found in retail clothing stores.

There is a comforting sense which comes from the statistical use of such reports as these now under consideration. As in unity there is strength, so in the combination of data, drawn from well distributed samples, affected by chance errors-damaging in individual cases—there are corrective influences at work which may establish the truth. It is not always safe, however, to rely too fully upon the operation of self-corrective tendencies. "Other things" which are expected to remain equal have a way of refusing so to behave. It is only when there is reasonable certainty that errors, if they exist, will compensate each other, that analysis may proceed on the basis of faulty data. The following analysis of total expense is made in the belief that this is true in this case.

1.—YEARLY AMOUNTS OF TOTAL EX-PENSE PER \$100 OF TOTAL NET SALES, 1919, 1918, AND 1914.

The average amount of total expense per \$100 of total net sales for the three years 1919, 1918, and 1914, combined, is \$22.69. In 1919, this amount was \$21.49; in 1918, it was

\$23.69; and in 1914, \$24.56. That is, between 1914 and 1919, total expense, expressed in terms of net sales, decreased by \$3.07, or by 12.5 per cent. The relationship between the amount for each of the years and that for the three years combined may be expressed as follows: 1919, 94.7 per cent.; 1918, 104.4 per cent.; and 1914, 108.2 per cent. The average amount for the three years combined is based upon 995 store-years, \$87,000,000 of

TABLE 56

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR ALL STORES,
1919, 1918, AND 1914

	s	tores Reporting	Ratio Which Amount of Total Expense per \$100 of Total Net Sales in			
Tears	Number of Store- years	Total Not Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Per Cent.	Per Cent.
Total	995	\$86,801,277	\$19,691,000	\$22.69		100.0
1919 1918 1914	363 233	44,846,377 29,040,009 12,914,891	9,639,555 6,879,283 3,172,162	21.49 23.69 24.56		94.7 104.4 108.2

TABLE 57

AVERAGE AMOUNT AND PER CENT. INCREASE OR DECREASE OF TOTAL NET SALES AND TOTAL EXPENSE PER STORE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, ALL STORES, 1919, 1918, AND 1914

		age Amount t Sales pe			age Amount		Average Amount of Total Expense per \$100 of Total Net Sales			
Tours			Per Cent. Increase over 1914		Per Cent. increase over 1914			Per Cent. Decrease from 1914		
	Amount	Amount	Graphic Per Cent. 0 30 60 90 120	Amount	Amount	Oraphic Per Cent. 0 30 60 90 120	Amount	Amount	Graphic Per Cent. 0 50 60 90 120	
1919	\$112,397	102.8		\$24,159	77.5		\$21.49	12.5	P	
1918	80,000	44.3		18,951	39.2		23.69	3.5		
1914	55,429			13,614			24.56			

total net sales, and \$20,000,000 of total expense. The number of stores, total net sales, total expense, and the relationship between sales and expense are shown for each of the years and for the three years combined, in Table 56.

Although the amount of total expense per \$100 of total net sales decreased between 1914 and 1919, the

actual amount of sales, as well as total expense per store, increased. Total net sales per store increased more rapidly than did total expense, the consequence being that the latter in terms of total net sales actually decreased. These changes for 1919 and 1918 based on 1914 are shown in Table 57.

In Tables 56 and 57, the number of

TABLE 58

AVERAGE AMOUNT AND PER CENT. INCREASE OR DECREASE OF TOTAL NET SALES AND TOTAL EXPENSE PER STORE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 IDENTICAL STORES, 1919, 1918, AND 1914

	Average Amount of Total Net Sales per Store			Averag	e Amount o	f Total Expense tore	Average Amount of Total Expense per \$100 of Total Net Sales			
Tears	Tears		Per Cent. Increase over 1914		Per Cent	. Increase over 1914	Per Ce		. Decrease from 1914	
	Amount	Amount	Oraphie Per Cent. 0 80 60 90 120 150	Amount	Amount	Graphic Per Cent. 0 30 60 90 120 150	Amount	Amount	Graphic Per Cent. 0 30 60 90 120 150	
1919	\$126,55¢	127.5		\$28,157	104.7		\$22.25	10.0	p	
1918	68,733	59.5		21,224	54.3		23.92	3.3	þ	
2914	55,680			13,753			24.73			

TABLE 59

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914, COMBINED

Geographical Divisions	Stores Reporting on Total Expense				Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
	Number of Store- years	Total ' Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	All Stores for Each Di- vision, is of the Amount for All Divisions	Per Cent.
Total (Average)	995	\$86,801,277	\$19,691,000	\$22.69		100.0
The East	159	13,474,301	3,015,479	22.38		98.6
The South	148	18,852,590	4,416,863	23.43	-	103.3
East North Central	295	22,338,824	4,988,317	22.33		98.4
West North Central	299	20,648,924	4,224,923	20.46		90.2
The West	94	11,486,638	3,045,418	26.51		116.8

Average \$22.69

stores considered varies for each of the years. In Table 58, comparisons similar to those in Table 57 are given for 229 identical stores reporting in each of the years 1919, 1918, and 1914.

For these 229 identical stores the amount of total expense per \$100 of total net sales was \$22.25 in 1919, \$23.92 in 1918, and \$24.73 in 1914. Based upon the year 1914, this amount of expense decreased 3.3 per cent, in 1918 and 10.0 in 1919, notwithstanding the fact that in both of the years total net sales and total expense increased noticeably. Based upon 1914, the increase in sales, however, for both of the years exceeded the per cent, of increase in total expense, the consequence being a decrease in the total expense per \$100 of total net sales. These amounts and relations are shown in Table 58.

Judged either by a varying number of stores or by identical stores during the years 1919, 1918, and 1914, the ratios of total expense to total net sales decreased. Moreover, the decrease between 1918 and 1919—a single year—is, for a varying number of stores, approximately three times as large as the decrease between 1914 and 1918—a four-year period. The corresponding ratio of decrease for the 229 stores for the same period is two to one.

An interesting comparison may be made between the different divisions of the United States in respect to the amounts of total expense per \$100 of total net sales. In Table 59, the stores in the five divisions are contrasted for the period 1919, 1918, and 1914.

Relatively, the total expense of the stores is highest in the West and lowest in the West North Central. The largest amount, however, is not more than 17 per cent. greater than the average, and the lowest amount is less than 10 per cent. smaller than the average for the country as a whole.

In Table 60, the different geographical divisions are contrasted for each of the three years for which data are available. In each of the divisions, total expense per \$100 of total net sales decreased between 1914 and 1919. Moreover, with the exception of the West North Central region, the amounts decreased between 1914 and Stated in another way, this means that in each of the various regions and in each of the years, with one exception, the sales increased faster than the total expense since 1914, the consequence being that, relatively, total expense per \$100 of total net sales decreased.

A.—Yearly Amounts of Total Expense per \$100 of Total Net Sales for Stores Classified by Size, 1919, 1918, and 1914.

Before discussing the relationship of total expense to total net sales for stores of different size, it is well to restate briefly the relationship of the different expense items to net sales for stores treated in this manner. It will be recalled that the amount of rent per \$100 of total net sales decreases with the size of stores. This tendency is present not only for the three years averaged, but also for

each year treated separately. The amount of wages and salaries per \$100 of total net sales, on the other hand, increases with the size of stores, not

TABLE 60

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY GEOGRAPHICAL DIVISIONS, 1919, 1918, AND 1914

			Stores Reportin	g on Total Exp	ense	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for All Divisions	
Geographical Divisions	Years	Number of Store- years	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	and for Each Division is for Each Year, Based on the Average for All Years Per Cent. 0 20 40 60 80 100 120 140	Fer
	Total (Average)	995	\$86,801,277	\$19,691,000	\$22.69		100.0
Total (Average)	1919	399	44,846,377	9,639,555	21.49		94.
	1918	363	29,040,009	6,879,283	23.69		104.
	1914	233	12,914,891	3,172,162	24.56		108.
	Total (Average)	159	13,474,301	3,015,479	22.58		98.
The East	1919	59	6,511,209	1,414,500	21.72		95.
	1918	57	4,530,530	1,030,019	22.74		100.2
	1914	43	2,432,562	570,960	23.47		103.4
The South	Total (Average)	148	18,852,590	4,416,863	23.43		103.3
	1919	64	9,918,641	2,252,947	22.71		100.1
	1918	54	6,541,961	1,557,030	23.80		104.9
	1914	30	2,391,988	606,886	25.37		111.8
	Total (Average)	295	22,338,824	4,988,317	22.33		98.4
East North Central	1919	117	11,606,804	2,437,492	21.00		92.6
	1918	107	7,418,691	1,763,034	23.76		104.7
	1914	71	3,313,329	787,791	23.78		104.8
	Total (Average)	299	20,648,924	4,224,923	20.46		90.2
West North Central	1919	121	10,843,846	2,043,539	18.85		83.1
001192 WA	1918	110	6,741,559	1,509,082	22.38		98.6
	1914	68	3,063,519	672,302	21.95		96.7
	(Average)	94	11,486,638	3,045,418	26.51		116.8
The West	1919	38	5,965,877	1,491,077	24.99		110.1
	1918	35	3,807,268	1,020,118	26.79		118.1
	1914	21	1,713,493	534,223	31.18		137.4

only for the three years combined, but similarly for each of the years treated independently. These expense items, combined, constitute the major part of total expense but differ as to direction of change in stores of different size. General expense, as shown in Section III of this report, increases with the size of the stores, for the three years combined and for the years individually.

With this brief paragraph recalling

TABLE 61

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914, COMBINED

	S	tores Reporting	on Total Exper	80	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
Classified Total Net Sales (in 000's)	Number of Store- years	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Stores of Different Size, is of the Amount for All	Per Cent.
Total (Average)	995	\$86,801,277	\$19,691,000	\$22.69		100.0
Under \$20	54	840,190	209,366	24.92	<u> </u>	109.8
\$20 to \$40	259	7,797,457	1,617,670	20.75		91.4
\$40 to \$60	227	11,171,288	2,177,295	19.49		85.9
\$60 to \$80	143	9,919,840	2,132,446	21.50		94.8
\$80 to \$100	84	7,572,127	1,630,359	21.53		94.9
\$100 to \$140	99	11,641,464	2,665,144	22.89		100.9
\$140 to \$180	44	7,019,014	1,596,821	22.75		100.3
\$180 to \$220	24	4,741,075	1,081,181	22.80		100.5
\$220 to \$300	25	6,565,746	1,640,564	24.99		110.1
\$300 to \$500	24	9,101,021	2,337,696	25.69		113.2
\$500 & over	12	10,432,055	2,602,458	24.95		110.0
Under \$40	313	8,637,647	1,827,036	21.15		93.2
\$40 to \$80	570	21,091,128	4,309,741	20.43		90.0
\$80 to \$180	227	26,232,605	5,892,324	22.46		99.0
\$180 & over	85	30,839,897	7,661,899	24.84		109.5

Average \$22.69

the relationship of each of the different expense items to net sales, we may proceed at once to discuss total expense treated from this point of view.

Following the same method of treatment employed above for the individual expense items, distinction is made between the three years combined and the years treated separately. The combined figures are shown in Table 61; those for 1919 are found in Table 62; those for 1918, in Table 63; and those for 1914, in Table 64.

The amount of total expense per \$100 of total net sales for the three years combined is \$22.69. The smallest amount for any group of stores is \$19.49, while the largest is \$25.69. The graphic part of Table 61 shows unmistakably the tendency for total expense, in terms of net sales, to increase with the size of stores. The only appreciable exception to the general rule is for the very small stores—those having net sales under \$40,000—the ratio for this group of

stores exceeding the ratios for those stores which are slightly larger. When the stores are grouped as in the lower part of Table 61, the tendency for the amounts to increase with the size of store is brought out more distinctly. The lowest amount—for stores with net sales between \$40,000 and \$80,000—is 90.0 per cent. of the average for all stores; while the amount for stores having sales of \$180,000 and over is 109.5 per cent. of the average for all stores. With such

TABLE 62

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1919

	Sto	res Reporting	on Total Expe	nse	Ratio Which Amount of Total Expense per \$100	
Classified Total. Not Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	of Total Net Sales for Stores of Different Size, is of the Amount for All Stores Per Cent.	Per Cent.
Total (Average)	599	\$44,846,377	\$9,639,555	\$21.49		100.0
Under \$20	5	78,229	16,326	20.87		97.1
\$20 to \$40	63	1,972,129	373,332	18.93		88.1
\$40 to \$60	95	4,676,110	793,998	16.98		79.0
\$60 to \$80	62	4,304,293	833,198	19.36		90.1
\$80 to \$100	41	3,731,161	699,954	18.76		87.3
\$100 to \$140	55	6,607,435	1,382,422	20.92		97.3
\$140 to \$180	25	3,984,355	856,696	21.50		100.0
\$180 to \$220	14	2,773,912	575,730	20.76		96.6
\$220 to \$300	16	4,194,849	1,017,280	24.25		112.8
\$300 to \$500	15	5,659,163	1,374,842	24.29		113.0
\$500 & over	8	6,864,741	1,715,787	24.99		116.3
Under \$40	68	2,050,358	389,658	19.00		88.4
\$40 to \$80	157	8,980,403	1,627,186	18.12		84.3
\$80 to \$180	121	14,322,951	2,939,072	20.52		95.5
\$180 & over	53	19,492,665	4,683,639	24.03		111.8

Average \$21.49

an array of ratios, it is difficult, if not impossible, to believe that the sample stores here studied do not indicate an influence which is characteristic of all stores, and which, at the same time, is not seriously, if at all, affected by elements of bias or error.

A word should be said about the very small stores in this connection. Undoubtedly, the high ratios for the small stores may be explained in part by the inclusion within "total expense" of a disproportionate amount

of wages and salaries. In Volume II, page 145, attention was drawn to the identity which exists in small stores between the proprietor and the sales force. It was indicated that in such stores it is probable that the major, if not the whole return of the proprietor is taken in the form of a salary, the effect being to weight "wages and salaries" for this group of stores more than for the larger stores where this condition does not hold. On the whole, however, with

TABLE 63

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1918

	St	ores Reporting	on Total Exp	nse	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Stores of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	363	\$29,040,009	\$6,879,283	\$23.69		100.0
Under \$20	21	340,718	85,813	25.19		106.3
\$20 to \$40	105	3,174,381	658,408	20.74		87.5
\$40 to \$60	BO	3,925,329	802,665	20.45		86.3
\$60 to \$80	57	3,968,845	873,087	22.00		92.9
\$80 to \$100	29	2,586,376	624,650	24.15		101.9
\$100 to \$140	31	3,578,648	876,590	24.50		103.4
\$140 to \$180	14	2,219,214	538,387	24.26		102.4
\$180 to \$220	7	1,386,406	347,146	25.04		105.7
\$220 to \$300	9	2,370,897	623,284	26.29		111.0
\$300 to \$500	7	2,679,984	746,850	27.87		117.6
\$500 & over	3	2,809,211	702,403	25.00	-	105.5
Under \$40	126	3,515,099	744,221	21.17		89.4
\$40 to \$80	137	7,894,174	1,675,752	21.23		89.6
\$80 to \$180	74	8,384,238	2,039,627	24.33		102.7
\$180 & over	26	9,246,498	2,419,683	26.17		110.5

stores of increasing size both total expense and wages and salaries in terms of net sales become larger.

It is unnecessary to comment at length upon the ratios of total expense to net sales for stores in each of the years 1919, 1918, and 1914. The same general tendency observed for stores in the combined years holds for stores in each of the years. It is true that the tendency for the amounts to increase with the size of the stores is not as consistent nor as uniform for the years separately as

it is when the years are combined. Of course, this is to be expected in view of the fact that fewer stores are used as samples. The differences, however, between the small and the large stores stand out distinctly and the general rule, noted for the three years combined, holds for the years individually.

The tendency for the amount of total expense per \$100 of total net sales to increase with the size of the store may be further tested by a study of the conditions in identical stores.

TABLE 64

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE, 1914

	Sto	ores Reporting	on Total Expe	nse	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
Classified Total Net Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Stores of Different Size, is of the Amount for All Stores	
Total (Average)	233	\$12,914,891	\$3,172,162	\$24.56		100.0
Under \$20	28	421,243	107,227	25,45		103.6
\$20 to \$40	91	2,650,947	585,930	22.10		90.0
\$40 to \$60	52	2,569,849	580,642	22.59		92.0
\$60 to \$80	24	1,646,702	426,161	25.88		105.4
\$80 to \$100	14	1,254,590	305,755	24.37		99.2
\$100 to \$140	13	1,455,381	406,132	27.91		113.6
\$140 to \$180	5	815,445	201,738	24.74		100.7
\$180 to \$220	3	580,757	158,305	27.26		111.0
\$220 to \$300	-	-	-	-		-
\$300 to \$500	2	761,874	216,004	28.35		115.4
\$500 & over	1	758,103	184,268	24.31		99.0
Under \$40	119	3,072,190	693,157	22.56		91.9
\$40 to \$80	76	4,216,551	1,006,803	23.88		97.2
\$80 to \$180	32	3,525,416	913,625	25.92		105.5
\$180 & over	6	2,100,734	558,577	26.59		108.3

Average \$24.56

For each year, 229 stores are used, but from year to year, of course, the number in each sales-group varies, the position of each store depending upon its sales for the year in question. Based upon all three years, the amount of total expense per \$100 of total net sales is \$23.31. For 1919,

TABLE 65

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 IDENTICAL STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914

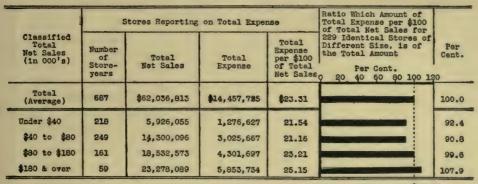
			Stores Reportin	g on Total Expe	nse for Each	or the Years	
Classified Total Net Sales (in 000's)	Years	Number of Store-	Total Net Sales	Total Expense		nse per \$100 of T Net Sales Graphic	otal
		years			Actual #0	\$10 \$20	\$30
	Total (Average)	687	\$62,036,813	\$14,457,725	\$23.31		
Total (Average)	1919	229	28,979,950	6,448,019	82.25		
	1918	229	20,319,791	4,860,343	23.92		
	1914	229	12,737,072	3,149,363	24.73		
	Total (Average)	218	5,926,055	1,276,627	21.54		
Under \$40	1919	52	957,275	178,834	18.68		
	1918	69	1,962,313	402,823	20.53		
	1914	117	3,006,467	694,970	23.12		
	Total (Average)	249	14,300,096	3,025,667	21.16		
\$40 to \$80	1919	83	4,833,297	884,373	18.30		
	1918	92	5,362,344	1,159,103	21.62		
	1914	74	4,104,455	982,191	23.93		1
	Total (Average)	161	18,532,573	4,301,697	23.21		
\$80 to \$180 ·	1919	80	9,385,008	2,010,180	21.42		
	1913	49	5,622,149	1,377,892	24.51		
	1914	32	3,525,416	913,625	25.92	D	
	Total (Average)	59	23,278,089	5,853,734	25.15		
\$180 & over	1919	34	13,804,370	3,374,632	24.45		
	1918	19	7,372,985	1,920,525	26.05	i	
	1914	6	2,100,734	558,577	26.59	i	

it is \$22.25; for 1918, it is \$23.92; and for 1914, \$24.73. The year-to-year comparison between the amounts is shown in tabular and graphic form in Table 65. The amounts for stores of different size for the combined years and for each of the years are shown in Tables 66, 67, 68, and 69.

Generally speaking, the amounts are larger for the larger stores, the variations being essentially the same for identical stores as were those for a varying number included in Tables 61 to 64. For 1914 and 1918, there is no exception to the general rule that the amounts of total expense per \$100

TABLE 66

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 IDENTICAL STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914



Average \$23.31

TABLE 67

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 STORES, 1919

	5	Stores Reporting	g on Total Ex	pense	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
Classified Total Not Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	229 Stores of Different Size, is of the Total Amount	Per Cent.
Total (Average)	229	\$28,979,950	\$6,448,019	\$22.25		100.0
Under \$40	32	957,275	178,834	18.68		84.0
\$40 to \$80	83	4,833,297	884,373	18.30		82.2
\$80 to \$180	80	9,385,008	2,010,180	21.42		96.3
\$180 & over	34	13,804,370	3,374,632	24.45		109.9

Average \$22.25

of total net sales increase with the size of the store. There is a slight exception for the year 1919, and this is carried over into the table for the three years combined. This, however,

is negligible and cannot be interpreted in any way as disproving the general tendency which has been observed both for identical and for a varying number of stores.

TABLE 68

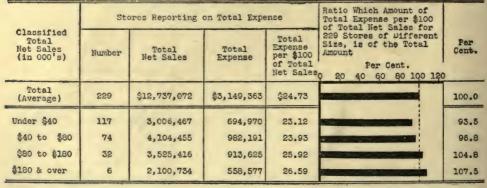
TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 STORES, 1918

Classified	Stor	res Reporting on	Total Expens	6	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for	
Total Net Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	229 Stores of Different Size, is of the Total Amount	Per Cent.
Total (Average)	229	\$20,319,791	\$4,860,343	\$23.92		100.0
Under \$40	69	1,962,313	402,823	20.53		85.8
\$40 to \$80	92	5,362,344	1,159,103	21.62		90.4
\$80 to \$180	49	5,622,149	1,377,892	24.51		102.5
\$180 & over	19	7,372,985	1,920,525	26.05		108.9

Average \$23.92

TABLE 69

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 STORES, 1914



Average \$24.73

B.—Yearly Amounts of Total Expense per \$100 of Total Net Sales for Stores Classified by Size of City in Which Located,* 1919, 1918, and 1914.

Throughout the discussion of expense ratios, stores have been classified by the size of the city in which they are located, in order to determine the relations existing between different expense items and net sales. Similar methods are followed in the treatment of total expense.

When stores are classified by cities of different size, the amounts of total expense per \$100 of total net sales increase directly with the size of the city. This is more markedly true for

total expense than it is for rent, or for wages and salaries.

Over the entire range of city sizes and from group to group, with one exception, as shown in Table 70, the amounts increase. The smallest amount is encountered in stores located in small cities, while the largest amount is found in cities which are largest in size. The average amount for the three years is \$22.69; the smallest is \$18.02; and the largest, \$31.45. The first is 79.4 per cent., and the latter, 138.6 per cent. of the average.

When the years are considered separately, as in Tables 71, 72, and 73, similar differences obtain for cities of different size. In each of the years, the ratios of total expense to total net

TABLE 70

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914, COMBINED

04	St	tores Reporting	on Total Exper	nse	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for Stores in	
Size of City (in 000's)	Number of Store- years	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Stores Per Cent.	Per ent.
Total (Average)	995	\$86,801,277	\$19,691,000	\$22.69	10	00.0
Under 10	471	22,238,957	4,008,472	18.02	7	79.4
10 to 20	141	9,973,959	2,075,597	20.81	9	91.7
20 to 40	139	13,019,750	2,851,462	21.90	9	96.5
40 to 120	136	19,416,908	4,751,144	24.47	10	07.8
120 to 200	44	7,993,138	2,102,061	26.30	11	15.9
200 to 440	34	7,718,985	1,876,823	24.31	10	07.1
440 & over	30	6,439,580	2,025,441	31.45	13	38.6

Average \$22,69

^{*} Population figures are for 1920.

sales, for stores in cities with population between 200,000 and 440,000, do not seem to follow the rule obtaining for the other stores. This is probably due to the presence of a disproportionate percentage of small stores. The amount of total expense per \$100 of total net sales increases with the size of stores, the only exception to this rule being the very small stores. Inasmuch as the relative number of large stores in large cities exceeds that of large stores in small cities, and that the ratio of total expense to total net sales increases with the size of the city, it is to be expected that the ratio of the two amounts will increase as the size of the city increases.

It will be remembered that the amount of rent per \$100 of total net sales increases noticeably with the size of the city; that is, rent is a function of city growth and concentration of population. Moreover, it will also be remembered that the amount of wages and salaries per \$100 of total net sales increases with the size of city. Together, these two items constitute the major portion of total expense and determine the direction of change for the aggregate.

The relationship of total expense to total net sales for stores classified by the size of city in which they are located is shown in another way in Tables 74 and 75. These tables include 229 stores which reported both their

Average \$21,49

TABLE 71

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1919

	Sto	res Reperting	on Total Expe	nse	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for Stores in	
Size of City (in 000's)	Humber	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Cities of Different Size, is of the Amount for All Stores	Per Cent.
Total (Average)	399	\$44,846,377	\$9,639,555	\$21.49		100.0
Under 10	191	11,348,674	1,870,233	16.48		76.7
10 to 20	54	5,070,266	976,986	19.27		89.7
20 to 40	55	6,578,074	1,367,982	20.80		96.8
40 to 120	55	10,322,387	2,456,551	23.80		110.7
120 to 200	17	4,102,667	1,023,654	24.95		116.1
200 to 440	14	3,823,761	885,804	23.17		107.8
440 & over	13	3,600,548	1,058,345	29.39		1.36.8

TABLE 72

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1918

	Sto	res Reporting o	on Total Expen	80	Ratio Which Amount of Total Ex- pense per \$100 of Total Net Sales for Stores in Cities of	
Size of City (in 000's) Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Different Size, is of the Amount for All Stores		
Total (Average)	363	\$29,040,009	\$6,879,283	\$23.69		100.0
Under 10	173	7,393,975	1,417,483	19.17		80.9
10 to 20	51	3,341,924	721,208	21.58		91.1
20 to 40	49	4,323,980	990,340	22.90		96.7
40 to 120	50	6,372,914	1,588,296	24.92		105.2
120 to 200	16	2,700,451	759,387	28.12		118.7
200 to 440	12	2,735,480	680,818	24.89		105.1
440 & over	12	2,171,285	721,751	55.24		140.3

TABLE 73

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR STORES CLASSIFIED BY SIZE OF CITY, 1914

	Sto	res Reporting o	n Total Exper	150	Ratio Which Amount of Total Expense per \$100 of Total Net	
Size of City (in 000's)	Mumber	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Pan Cant	Per Cent.
Total (Average)	233	\$12,914,891	\$3,172,162	\$24.56		100.0
Under 10	107	3,496,308	720,756	20.61		83.
10 to 20	36	1,561,769	377,403	24.17		98.
20 to 40	35	2,117,696	493,140	23.29		94.
40 to 120	33	2,721,607	706,297	25.95		105.
120 to 200	11	1,190,020	319,020	26.81		109.
200 to 440	8	1,159,744	310,201	26.75		108.
440 & over	5	667,747	245,345	36.74		149.

Average. \$24.56

total expense and their total net sales for each of the three years 1919, 1918, and 1914. For the 174 stores located in cities with population under 40,000, the average yearly total expense per store for the three years combined is \$12,630. In 1914, this amount was \$9,014, but by 1919 it had grown to \$16,210. This represents an increase of \$7,196 or 79.8 per cent. For the 55 stores in cities with population of 40,000 and over, the average yearly total expense per store, for the three years combined, is \$47,665; in 1914, this amount was

\$28,743, but by 1919 it had grown to \$65,955 or 129.5 per cent.

The total expense per store for stores in the larger cities is approximately four times as large as the total expense per store for stores located in the smaller cities. Relatively, this proportion also holds for each of the three years. This fact is graphically illustrated in Table 74.

The amounts of total expense per \$100 of total net sales for identical stores in cities of different size for the years 1919, 1918, and 1914, are shown in Table 75. While the total

TABLE 74

AVERAGE TOTAL EXPENSE PER STORE FOR 229 IDENTICAL STORES CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

Size			porting on Tota ach of the Year		Ratio Which Amount of Total Expense per Store for Each Year is of the Average for the Three	
of City (in 000's)	Years	Number of Store- years	Number of Total Average Total Store- Expense Expense		Per Cent. 0 40 80 120 160 200 240 280 320	Per Cent.
	Total (Average)	687	\$14,457,725	\$21,045		100.0
Total (Average)	1919	559	6,448,019	28,157		133.8
,	1918	229	4,860,343	21,224		100.9
	1914	229	3,149,363	13,753		65.4
	Total (Average)	522	6,593,044	12,630		60.0
Under 40	1919	174	2,820,493	16,210		77.0
	1918	174	2,204,051	12,667		60.2
	1914	174	1,568,500	9,014		42.8
	Total (Average)	165	7,864,681	47,665		226.5
40 and	1919	55	3,627,526	65,955		313.4
	1918	55	2,656,292	48,296		229.5
	1914	55	1,580,863	28,743		136.6

Average \$21,045

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES FOR 229 STORES CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

		Sto	ores Reporting	on Total Expens	Ratio Thich Amount of To- tal Expense per \$100 of Total Net Sales for Each	te.	
Size of Gity (in 000's)	Years	Number of Store- years	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Per Cent.	Per Cent.
	Total (Average)	687	\$62,036,813	\$14,457,725	\$23.31		100.0
Total (Average)	1919	229	28,979,950	6,448,019	22.25		95.5
(11111111111111111111111111111111111111	1918	229	20,319,791	4,860,343	23.92		102.6
	1914	229	12,737,072	3,149,363	24.73		106.1
	Total (Average)	522	31,895,664	6,593,044	20.67		88.7
Under	1919	174	14,522,508	2,820,493	19.42		83.3
30	1918	174	10,375,202	2,204,051	21.24		91.1
	1914	174	6,997,954	1,568,500	22.41		96.1
	Total (Average)	165	30,141,149	,864,681	26.09		111.9
40 and	1919	55	14,457,442	3,627,526	25.09		107.6
0.01	1918	55	9,944,589	2,656,292	26.71		114.6
	1914	55	5,739,118	1,580,863	27.55		118.2

Average \$23.31

expense per store is four times as large, on the average, in stores in the large cities as it is in stores in the small cities, the total expense per \$100 of total net sales is less than \$6.00 more for stores in large than for those in small cities. This proportion roughly holds for each of the years.

While total expense and total net sales rapidly increased between 1914 and 1919, the amount of total expense per \$100 of total net sales actually decreased. For the stores in the

smaller cities, the decrease between 1914 and 1918 is 5.2 per cent., and between 1914 and 1919, 13.3 per cent. Similar, but smaller, decreases occurred for the stores in the larger cities, the amount between 1914 and 1918 being 3.0 per cent., and between 1914 and 1919, 8.9 per cent.

The relations between the growth of total expense and total net sales per store are shown in Table 76, which serves as a convenient summary for the details given in the two preceding tables.

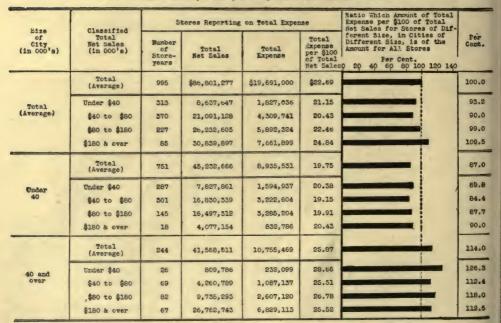
TABLE 76

RELATION OF TOTAL EXPENSE TO TOTAL NET SALES FOR 229 STORES CLASSIFIED BY SIZE OF CITY, 1919, 1918, AND 1914

			Total Not Sales				Tot	tal Expense		
Size	Years	Mumber		Average	Amount Store		Average Amount per Store		Per \$100 of Total Net Sales	
(in 000's)		Stores	Total Amount	Amount	Per Cent. Increase over 1914	Total Amount	Amount	Per Cent. Increase over 1914	Amount	Per Cent. Decrease from 1914
	1919	229	\$28,979,950	\$126,550	127.5	\$6,448,019	228,157	104.7	\$22.25	10.0
Total (Average)	1918	229	20,319,791	88,733	59.5	4,860,343	21,224	54.3	23.92	3.3
	1914	229	12,737,072	55,620		3,149,363	13,753		24.75	
	1919	174	14,522,508	85,463	107.5	2,820,493	16,210	79.8	19.42	13.3
Under 40	1918	174	10,375,202	59,628	48.3	2,204,051	12,667	40.5	21.24	5.2
	1914	174	6,997,954	40,218		1,569,500	9,014		22.41	
	1919	55	14,457,442	262,863	151.9	3,627,526	65,955	129.5	25.09	8.9
40 and	1918	55	9,944,589	100,811	73.3	2,636,292	48,296	68.0	26.71	3.0
	1914	55	5,739,118	104,548		1,580,863	28,743		27.55	

TABLE 77

**TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND CITY, 1919, 1918, AND 1914, COMBINED



C.—Yearly Amounts of Total Expense per \$100 of Total Net Sales for Stores Classified by Size of Store and Size of City in Which Located,* 1919, 1918, and 1914.

In the preceding discussion, the size of stores in the respective cities was ignored. In that which follows, the stores are classified into four major groups and distinguished according to cities with population under 40,000 and 40,000 and over. The analysis follows that of the detailed expense items.

Table 77 shows the relation of total expense to total net sales for stores classified both by size and by the population of the cities in which they are located. The ratios increase with the size of the stores when the size of cities is ignored. When the stores are classified by size as well as by size of city, however, the amounts of total expense per \$100 of total net sales remain constant for the stores in the smaller cities, but decrease with the size of stores in the larger cities. In the former group, the average amount of total expense per \$100 of total net sales is 87.0 per cent. of what it is for

TABLE 78

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND CITY, 1919

Size	Classified	St	ores Reporting	on Tetal Exp	ense	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for Stores of Different	
of City (in 000's)	Total Not Sales (in 000's)	Rusber	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Per Cent.	Per Cent.
	Total (Average)	599	\$44,846,377	\$9,639,555	\$21.49		100.0
Total	Under \$40	68	2,050,358	389,658	19.00		88.4
(Average)	\$40 to \$80	157	8,980,403	1,627,186	18.12		84.3
	\$80 to \$180	121	14,322,951	2,939,072	90.52		95.5
	\$180 & over	53	19,492,665	4,683,639	24.03		111.8
	Total (Average)	500	22,997,014	4,215,201	18.53		85.3
Under	Under \$40	63	1,902,930	342,855	18.02		83.9
40	\$40 to \$80	138	7,775,289	1,358,462	17.47		81.5
	\$80 to \$180	84	9,876,041	1,817,820	18.41		85.7
	\$180 & over	15	3,442,754	696,064	20.22		94.1
	Total (Average)	99	21,849,363	5,424,354	24.83		115.5
40 and	Under \$40	5	147,428	46,803	31.75		147.7
OVER	\$40 to \$80	19	1,205,114	268,724	22.30		103.8
-	\$80 to \$180	37	4,446,910	1,121,252	25.21		117.3
	\$180 & over	38	16,049,911	3,987,575	24.84		115.6

Average \$21.49

^{*} Population figures are for 1920.

all stores, while for the latter, it is 114.0 per cent. of the average.

For the stores in cities with population of 40,000 and over, there is a marked tendency for the amount of total expense per \$100 of total net sales to decrease as the stores increase in size.

A word concerning the relative amounts of total expense per \$100 of total net sales for stores of the same size located in small and large cities may be of interest. Stores located in small cities and with yearly sales of less than \$40,000 paid \$20.38 in total

expense per \$100 of total net sales, while similar sized stores in large cities paid \$28.66, or \$8.28 or 40.6 per cent. more. As the stores increase in size the difference seemingly attributable to the size of city decreases—with one exception—until for the largest stores—those with yearly sales of \$180,000 and over—the difference is \$5.09.

It should be remembered that we are dealing with total expense—an amount made up of a variety of details which differ not only in amount but also in their relationship to the

TABLE 79

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND CITY, 1918

Bize	Classified	Sto	res Reporting o	n Total Expe	200	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for Stores of	
of City (in 000's)	Total Net Sales (in 000's)	Sumber	Total Bet Sales	Total Expense	Total Rxpense pe. \$100 of Total Net Sales	Different Size, in Cities of Different Size, is of the Amount for All Stores Per Cent. 20 40 60 80 100 120 140	Per Cent.
	Total (Average)	363	\$29,040,009	\$6,879,283	\$23.69		100.0
Total	Under \$40	126	3,515,099	744,221	21.17		89.4
(Average)	\$40 to \$80	137	7,894,174	1,675,752	21.23		89.6
	\$80 to \$180	74	8,384,238	2,039,627	24.33		102.7
	\$180 & over	26	9,246,498	2,419,683	26.17		110.5
	Total (Average)	273	15,059,879	3,129,031	20,78		87.7
Under	Under \$40	118	3,265,193	667,699	20.45		86.3
40	\$40 to \$80	106	5,980,534	1,174,303	19.64		82.9
	\$80 to \$180	46	5,179,752	1,150,307	22.21		93.8
	\$180 & over	3	634,400	136,722	21.55		91.0
	Total (Average)	90	13,980,130	3,750,252	26.83		113.3
40 and	Under \$40	8	249,906.	76,522	30.62		129.3
over	\$40 to \$80	31	1,913,640	501,449	26.20		110.6
	- \$80 to \$180	28	3,204,486	889,320	27.75		117.1
	\$180 & over	23	8,612,098	2,282,961	26.51	2	111.9

Average \$23.69

size of store and size of city. In this connection, a word of recapitulation may be of interest concerning some of the major items.

The amount of rent per \$100 of total net sales is noticeably larger for stores in large cities than for stores in small cities, but in both groups it rapidly decreases as the size of the stores increases. The amount of wages and salaries per \$100 of total net sales, while larger for stores in the large cities than for stores in the small cities, increases with the size of the stores in the small cities and de-

creases with the size of the stores in the large cities. General expense per \$100 of total net sales, on the other hand, shows a reverse tendency. The ratios between the two amounts decrease as the size of the stores increase for the stores in small cities, and increase with the size of the stores in large cities. It is not surprising, in view of these diverse tendencies in the expenses which make up the total, that the direction of change in total expense with changing sizes of stores, is not clearly defined.

A comparison of total expense and

TABLE 80

TOTAL NET SALES, TOTAL EXPENSE, AND AMOUNT OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, FOR STORES CLASSIFIED BY SIZE OF STORE AND CITY, 1914

Size	Classified	Sto	ores Reporting of	on Total Expe	nse	Ratio Which Amount of Total Expense per \$100 of Total Net Sales for Stores of	
of City (in 000's)	Total Not Sales (in 000's)	Number	Total Net Sales	Total Expense	Total Expense per \$100 of Total Net Sales	Different Size, in Cities of Different Size, is of the Amount for All Stores Per Cent. 20 40 60 80 100 120 140	Per Cent.
	Total (Average)	233	\$12,914,891	\$3,172,162	\$24.56		100.0
Total	Under \$40	119	3,072,190	693,157	22.56		91.9
(Average)	\$40 to \$80	76	4,216,551	1,006,803	23.88		97.2
	\$80 to \$180	32	3,525,416	913,625	25.92		105.5
	\$180 & over	6	2,100,734	558,577	26.59		108.3
	Total (Average)	178	7,175,773	1,591,299	22.18		90.3
Under	Under \$40	106	2,659,738	584,383	21.97		89.5
40	\$40 to \$80	57	3,074,516	689,839	22.44		91.4
	\$80 to \$180	25	1,441,519	317,077	22.00		89.6
	\$180 & over	-	-	-	-		-
	Total (Average)	55	5,739,118	1,580,863	27.55		112.2
40 and	Under \$40	13	412,452	108,774	26.37		107.4
Over	\$40 to \$80	19	1,142,035	316,964	27.75		113.0
	\$80 to \$180	17	2,083,897	596,548	28.63		116.6
	\$180 & over	6	2,100,734	558,577	26.59		108.3

Average \$24.56

total net sales for stores reporting both amounts is shown in Table 77 for the three years 1919, 1918, and 1914, combined.

When each of the years are considered separately, notwithstanding the fact that the number of stores changes in each year, the amounts of

total expense per \$100 of total net sales decrease with the size of the stores in the larger cities and remain constant or slightly increase with the size of stores for those located in the smaller cities. The graphic parts of Tables 78, 79, 80 show clearly the situation for each of the years. They

TABLE 81

NUMBER OF STORES REPORTING CLASSIFIED AMOUNTS OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES CLASSIFIED BY SIZE OF CITY AND SIZE OF STORE, 1919

		Number of !	er of a	store	s Rep	ortin	g Cla	ssifi Total	ed Am	ounts Sales
Size of City (in 000's)	Classified Total Net Sales (in 000's)	Total	Under \$10	\$10 to \$15	\$15 to \$20	\$20 to \$25	\$25 to \$30	\$30 to \$40	\$40 to \$50	\$50 to \$60
	Total	399	16	74	141	93	51	20	3	1
Total	Under \$40	68	3	18	18	18	7	3	-	1
Total	\$40 to \$80	157	11	37	61	28	13	7	-	-
	\$80 to \$180	121	2	16	48	30	19	4	2	-
	\$180 & over	53	-	3	14	17	12	6	r	•
	Total	300	16	70	123	64	18	8	1	-
Under	Under \$40	63	3	17	18	17	6	2	-	-
40	\$40 to \$80	138	11	35	57	22	8	5	-	-
	\$80 to \$180	84	2	16	41	21	3	-	1	-
	\$180 & over	15	-	2	7	4	1	1	-	•
	Total	99	-	4	18	29	33	12	2	1
	Under \$40	5	-	1	-	1	1	1	-	1
40 and over	\$40 to \$80	19	٠ :	2	4	6	5	2	-	•
	\$80 to \$180	37	-	-	7	9	16	4	1	-
	\$180 & over	38	-	1	7	13	11	5	1	

can be studied with profit in relation to other tables for the detailed expense items and should be interpreted in the light of the discussion there found.

Table 81 is introduced to support the average figures shown in Table 78. Just how accurate is the average total expense per \$100 of total net sales for each of the groups of stores, as given in Table 78, is revealed in the details in Table 81. To illustrate the meaning of this table, the group of stores having, annually, total net sales between \$80,000 and \$180,000 may be chosen. The average amount of total expense per \$100 of total net sales for the 84 stores in the small

cities is \$18.41, forty-one or approximately one-half of the stores being included in the group-\$15 to \$20. Sixteen or 19.0 per cent, report amounts between \$10 and \$15, and 21 or 25.0 per cent. report amounts between \$20 and \$25. The average amount of total expense per \$100 of total net sales, for the 37 stores with the same amount of sales but located in cities of 40,000 and over, is \$25.21 or \$6.80 more than the average for those located in the small cities. Of these 37 stores, 16 are in the average group-\$25 to \$30-16 report amounts between \$15 and \$25, and 1 reports more than \$40.

Table 81 shows the number of

TABLE 82

NUMBER AND PER CENT. OF STORES IN CITIES OF SPECIFIED SIZE AND WITH TOTAL NET SALES OF \$80,000 TO \$180,000, HAVING CLASSIFIED AMOUNTS OF TOTAL EXPENSE PER \$100 OF TOTAL NET SALES, 1919

	Number and Per Cent. of Stores									
Yearly Total Expenditures per \$100			lation 40,000		Popul 40,000 s	ation and over				
of Total Net Sales			Per Cent.	Number	F	er Cent.				
	Number	Amount	Graphic Per Cent. 0 10 20 30 40 50		Amount	Graphic Per Cent. 0 10 20 30 40 50				
Total	84	100.0		37	100.0					
Under \$10	\$	2.4			-					
\$10. to \$15	16	19.0		-	-					
\$15 to \$20	41	48.8		7	18.9					
\$20 to \$25	21.	25.0		9	24.3					
\$25 to \$30	3	3.6	-	16	43.3					
\$30 to \$40	-	-		4	10.8					
\$40 to \$50	1	1.2		1	2.7					
\$50 to \$60	-	-			_					

stores, classified by size and by the population of the city in which they are located, reporting in 1919 different amounts of total expense per \$100 of total net sales. In Table 82, the variation in the number of stores having each amount is shown for stores with sales of \$80,000 to \$180,000, located in two groups of cities.

D.—Summary.

- (1) Total expense per \$100 of total net sales decreased from \$24.56 in 1914 to \$21.49 in 1919. For the three years 1919, 1918, and 1914, combined, the average amount was \$22.69. For a group of identical stores the average amount for 1914 was \$24.73 and for 1919, \$22.25.
- (2) The amounts of total expense per \$100 of total net sales increase with the size of stores.

- This is true for the three years 1919, 1918, and 1914, combined, and for them individually.
- (3) The amounts of total expense per \$100 of total net sales increase with the size of cities in which the stores considered are located. In this respect, total expense agrees with rent, and with wages and salaries—the major amounts which make up the total.
- (4) The amounts of total expense per \$100 of total net sales are larger in stores in large cities than in stores in small cities. They are constant, however, for stores of different size in small cities, and decrease with the increasing size of stores in large cities. In this respect, the reader should compare total expense with rent, wages and salaries, and general expense.

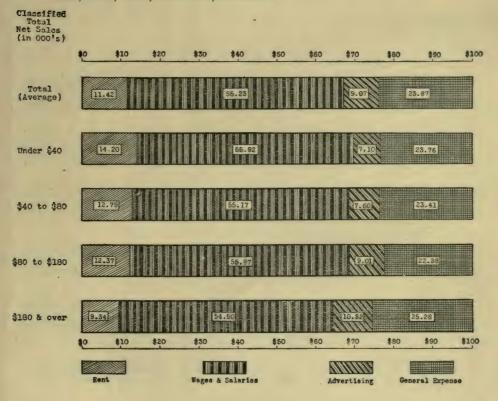
VI. RECAPITULATION OF EXPENSE RATIOS

HE following tables and charts summarize briefly the expense ratios for the different elements of expense discussed in this and other volumes in the series.

As has been pointed out in several places in this and in preceding volumes, only those stores which reported specific expense items in satisfactory form were used for expense ratios.

CHART 1

GRAPHIC REPRESENTATION OF THE AMOUNTS* WHICH EXPENDITURES FOR RENT, WAGES AND SALARIES, ADVERTISING AND GENERAL EXPENSES CONSTITUTE OF EVERY \$100 OF TOTAL EXPENSE IN STORES OF DIFFERENT SIZE, 1919, 1918, AND 1914, COMBINED



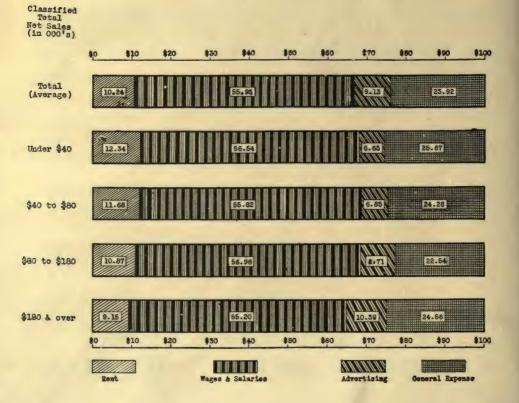
^{*} This chart is drawn on the assumption that the sum of the ratios for the expense items is equal to 100 per cent. The amounts, when combined, however, do not equal \$100. The reason for this is given in this section.

This makes it impossible, by adding together the ratios for the different major items of expense to total net sales, to secure a figure which exactly corresponds to that for the total treated by itself. Moreover. it is im-

possible, by adding together the ratios for the different items which make up general expense, to secure an amount which will necessarily agree with the ratio for the total treated independently. The agreement, however,

CHART 2

GRAPHIC REPRESENTATION OF THE AMOUNTS* WHICH EXPENDITURES FOR RENT, WAGES AND SALARIES, ADVERTISING AND GENERAL EXPENSES CONSTITUTE OF EVERY \$100 OF TOTAL EXPENSE IN STORES OF DIFFERENT SIZE, 1919



^{*} This chart is drawn on the assumption that the sum of the ratios for the expense items is equal to 100 per cent. The amounts, when combined, however, do not equal \$100. The reason for this is given in this section.

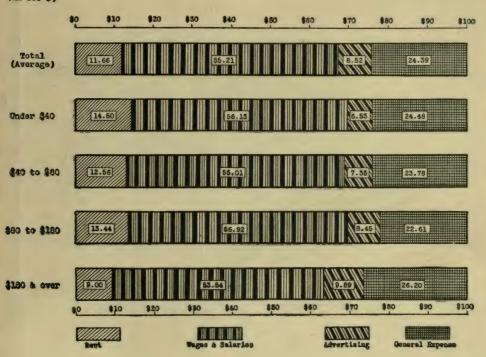
is close enough for the major items of expense to justify a comparison for the different years for stores of different size and location.

It should be noted that in the tables and charts summarizing expense distribution ratios, the sum of the ratios for the detailed expense items do not exactly agree with the total. In this summary, it was thought better to give the exact amounts as they appeared in the detailed discussion and

CHART 3

GRAPHIC REPRESENTATION OF THE AMOUNTS* WHICH EXPENDITURES FOR RENT, WAGES AND SALARIES, ADVERTISING AND GENERAL EXPENSES CONSTITUTE OF EVERY \$100 OF TOTAL EXPENSE IN STORES OF DIFFERENT SIZE, 1918

Classified Total Net Sales (in 000's)



^{*}This chart is drawn on the assumption that the sum of the ratios for the expense items is equal to 100 per cent. The amounts, when combined, however, do not equal \$100. The reason for this is given in this section.

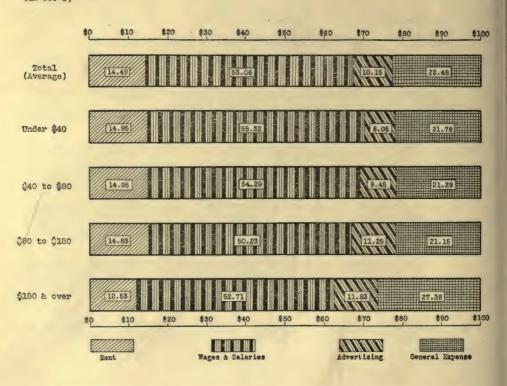
to adjust the graphic figures on this basis, rather than to alter the amounts by a difference necessary to make them total to 100 per cent. Accordingly, the amounts agree with those which appear in the detailed discussion. The fact that they do not

add exactly to 100 per cent. does not detract from the purpose of the graphic summaries. They are essentially and sufficiently correct—the margin of error between the amounts and the graphical representation being negligible. Moreover, the

CHART 4

GRAPHIC REPRESENTATION OF THE AMOUNTS* WHICH EXPENDITURES FOR RENT, WAGES AND SALARIES, ADVERTISING AND GENERAL EXPENSES CONSTITUTE OF EVERY \$100 OF TOTAL EXPENSE IN STORES OF DIFFERENT SIZE, 1914

Classified Total Net Sales (in 000's)



^{*} This chart is drawn on the assumption that the sum of the ratios for the expense items is equal to 100 per cent. The amounts, when combined, however, do not equal \$100. The reason for this is given in this section.

amounts of bushelling expense per \$100 of total net sales of clothing have been eliminated from these distributions because the ratios were computed in terms of sales of clothing, rather than net sales of all merchandise. Moreover, the amounts are small, relatively, and it would be difficult to illustrate them graphically. How small they are both absolutely and relatively is shown in the section dealing with this subject.

Charts 1, 2, 3, and 4 show relatively the proportions which rent, wages and salaries, advertising, and general expenses constitute of total expense for stores classified by size. Chart 1 shows the condition for the years 1919, 1918, and 1914, combined, and Charts 2, 3, and 4, respectively, show the conditions for the years 1919, 1918, and 1914, separately.

The advantages of these charts are that they throw into graphic contrast the relationships obtaining between the different expense ratios for the different years and exhibit the tendencies of change for stores of different size.

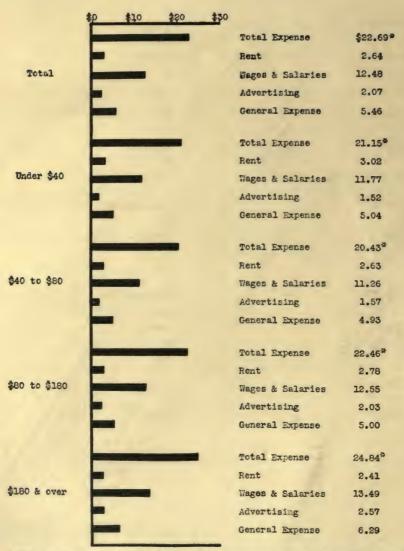
In Table 83 the amounts of the different expense ratios are thrown into juxtaposition for stores of different size for the years 1919, 1918, and 1914, combined and averaged. In Table 84, ratios of classified expenses per \$100 of total net sales are given for stores of different size in cities grouped according to population.

It should be remembered that these tables and charts are not intended to take the place of the detailed discussion of the points which they illustrate. They do not provide for all of the conditions affecting each item of expense and contain none of the limitations of the data to which attention is drawn in the fuller discussion of each topic.

TABLE 83

AMOUNT OF CLASSIFIED EXPENSES PER \$100 OF TOTAL NET SALES FOR ALL STORES CLASSIFIED BY SIZE, 1919, 1918, AND 1914, COMBINED

Classified Total Net Sales (in 000's)	Classified Expenses	Amount of Classified Expenses per \$100 of Total Net Sales
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^{*} This is not the sum of the detail. For explanation see the Introduction and Section VI. 270

TABLE 84

AMOUNT OF CLASSIFIED EXPENSES PER \$100 OF TOTAL NET SALES FOR ALL STORES CLASSIFIED BY SIZE OF STORE AND CITY, 1919, 1918, AND 1914, COMBINED

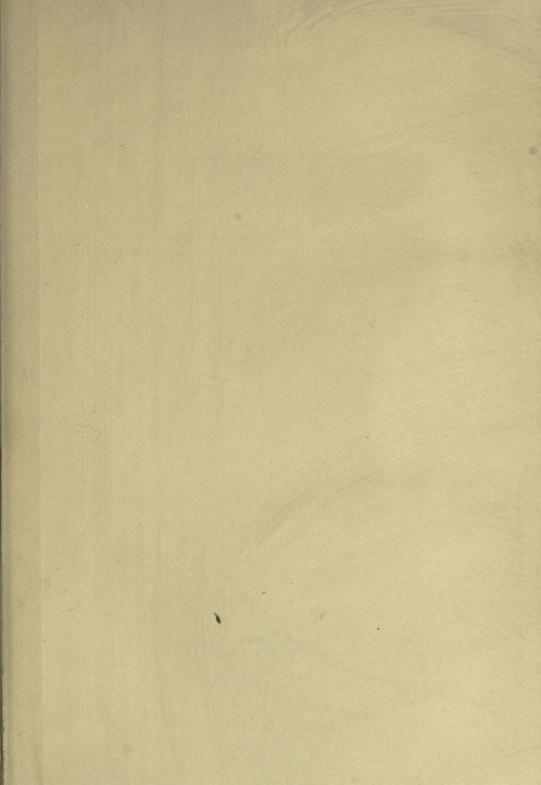
	Population Under 40,000				Population 40,000 and over		
Classified Total Met Sales (in 000's)	p \$30 320 \$30	Classified Expenses	Amount of Classified Expenses per \$100 of Total Hat Salas	Classified Total Net Sales (in 000's)	o \$10 \$20 \$5	Classified Expenses	Amount of Classified Expenses per \$100 or Total Het Sales
		Total Expense	\$19.75*			Total Expense	\$25.07
		Rent	2.11			Rent	3,90
Total		Wages & Salaries	11.50	Total		Wages & Salaries	23,73
		Advertising	1.52			Advertising	2.67
	General Expen	General Expense	4.82			General Expense	5.34
		Total Expense	20.38*			Total Expense	89.66 ⁹
		Rent	2.64			Rent	6.43
Under \$40		Wages & Salaries	11.45	Under \$40		Wagos & Salstries	15.66
		Advertising	1.47			Advertising	2,00
		General Expense	5.11			General Expense	4.40
		Total Expense	19.15*			Total Expense	25.810
		Rent	2.09			Rent	4.72
\$40 to \$80		Nagos & Salaries	10.71	\$40 to \$80		Deges & Selaries	15.40
		Advertising	1.45			Advertising	2,08
	-	General Expense	4184		-	General Expense	5.29
		Total Expense	19.91*			Total Expense	26.78
		Rent	2,05			Rest	4204
\$80 to \$180		Wages & Salaries	11.78	\$80 to \$180		Wages & Salaries	25.84
		Advertising	1.59			Advertising	2.75
		General Expense	4.71			General Expense	5.52
		Total Expense	20.43*			Total Expense	25.58*
		Rent	1.51			Ment	2.55
\$180 à over		Wages & Salaries	12.32	\$180 & over		Wages & Salaries	13.69
		Advertising	1.57			Advertising	2274
		General Expense	4.72			General Expense	6.54

^{*} This is not the sum of the detail. For explanation see the Introduction and Section VI.

T is unnecessary, in the conclusion to this volume, to restate the more significant ratios and principles which an analysis of the data developed. Both are fully covered in the summaries and in the text treat-It is worth while, however, ment. briefly and as a concluding word, to repeat that the data which were used were carefully scrutinized for completeness, accuracy, and consistency, and it is believed that they are adequate as a basis for a description of expense distribution for the retail clothing trade. Accordingly, they may be used by merchants to gauge their merchandising practices and to estimate the degree to which their expense ratios conform to or differ from those current in this field for the years in question.

The methods by which items of expense are treated in this volume are in keeping with those followed in Volume II, and agree with those which will characterize the volume on Advertising.

If those who are financially or otherwise interested in the distribution of clothing, will frequently consult this volume, and be guided in distributing their expenses by the results set forth, it is believed that they cannot help but profit in their merchandising methods.





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